

There are two versions of these stories. The first versions are for when there are memory probes. The Target probes are pairs of object names, and the Person probes are the name of the story protagonist. The second versions are for when the spatial gradient is assessed using anaphoric reference rather than interrupting reading with probes.

### **Story 1**

Wilbur wasn't so sure he wanted to be head of the center anymore. He had just been informed that the board of directors would be making a surprise inspection tomorrow. He immediately called all of the center's employees together in the library and told them they had less than twenty-four hours to clean up the center. He explained about the visit and said that all of their jobs were at stake. He told everyone to spread out and clean and organize every room. He went into the laboratory and made sure it was being cleaned, and then headed off to supervise the rest of the workers. He walked from the laboratory into the wash room.

#### Target5

He was pleased to see the wash room's sparkling tile floor since he knew the directors were more impressed by cleanliness than good research. He hurried into the repair shop and yelled at the foreman for not getting those greasy machine parts out of sight. Next he thought he'd better check to see that the researchers were getting things organized. He walked from the repair shop into the experiment room.

#### Target2

Looking around the experiment room, he reminded himself to make sure the experimenters would be busy conducting studies tomorrow so the directors would see how industrious they were. As he went into the reception room, he thought about the presentation he was planning to make to the directors.

#### Person1

Next he walked from the reception room into the conference room.

#### Target9

Sitting down at the table in the conference room, he started to write down notes for his presentation. He imagined himself giving a high-powered talk, and began to feel the visit might go well after all.

### **Story 2**

Tina stood in the middle of the library, receiving a reprimand from the director. One of her duties was ordering supplies, but the test tubes she had ordered last week hadn't arrived yet. Now, the new project had to be delayed until the tubes arrived.

#### Person8

She was angry because it wasn't her fault that the shipment hadn't arrived. She would have to find more reliable suppliers. Meanwhile, she went into the laboratory to think where she could come up with a lot of tubes fast, and it occurred to her that she might be able to scrounge up some in the building. She walked from the laboratory into the wash room.

#### Target5

However, she remembered that the box of tubes had already been used up. She was wondering where she could find some tubes when the head researcher came in to yell at her. She said it wasn't her fault since she had placed the order long ago, and then she escaped to check the repair shop. Out of desperation, she checked through some boxes behind the plywood, but found nothing. Then she walked from the repair shop into the experiment room.

#### Target2

After poking around in the corners of the experiment room and coming up empty-handed, Tina wondered how she would ever find enough tubes to keep the new project running on schedule. She went to the reception room to find the inventory person, in the hope of discovering any back stock that might have been missed during inventory. The receptionist told her that she had seen the man heading for the conference room a few hours earlier. So Tina walked from the reception room into the conference room.

#### Target9

She couldn't find the man, so she called the supplier on the phone to complain about the delinquent shipment. They insisted that no order had ever been received. She realized her assistant had forgotten to place the order.

### **Story 3**

Barbara had just been hired as a consultant for remodeling the research center. She usually worked on homes, so she was nervous about this assignment. She had only accepted because the director was a good friend. She arrived early one morning and was shown into the laboratory. She was assured by the director that the job would be routine. When they went into the storage room, she looked at the stained walls and told the director she would have to see for herself what the job would be like. She walked from the storage room into the repair shop.

#### Target4

Looking about, she was stopped short by the sight of machine parts all over the repair shop. She fled the room and found herself in the lounge.

Person3

She thought this room could be salvaged by a coat of bright paint. Next she walked from the lounge into the reception room.

Target1

In the reception room, she wanted to put some paintings on the walls and replace the furniture so that it would present a good impression to visitors. Then she walked into the office and asked the secretary how she would like the room changed. The secretary told her to buy a new desk and to get rid of the ugly picture. Then she walked from the office into the library.

Target8

Walking around, she noticed that the old and tattered furniture made the library look as bad as the conference room. She thought all the rooms were either an ugly disaster or hopelessly nondescript. Then the director entered, and she accused him of not telling her just how bad this job would be.

#### **Story 4**

Sandra had just been promoted to research associate at the center. Today she was nervous because she was going to have her first meeting with the director. She went into the conference room to prepare for the meeting.

Person9

She reached into her briefcase for her notes and discovered to her horror that the notes were missing. She tried to calm herself and think where they might be. She entered the library, reassured by the thought that the notes had to be in the building because she had brought them with her that morning. She walked from the library into the storage room.

Target6

However, she was pretty sure that she hadn't left her notes there. She didn't think she left her notes among all the stored junk in the storage room, but she looked around anyway. Beginning to panic, she rushed into the wash room. She checked her locker, but all she found was a stale sandwich. Then she walked from the wash room into the lounge.

Target3

However, she dismissed that thought right away and looked all over the lounge. She didn't see them so she went into the experiment room. She looked nervously through the booths, trying to recall what her notes said since she was quickly losing any hope of finding them. Finally, she walked from the experiment room into the office.

#### Target10

Had she left her notes there? She was overcome by relief when the secretary told her she had found the notes by the water fountain. She still had time to prepare for the meeting, so she grabbed the pages and headed back to the reception room to tell the receptionist that she would be in the conference room if the director asked.

#### Story 5

Peter was irritated because his boss kept demanding to know why the shipment of cabinets hadn't arrived at the research center. As head of shipping and receiving, Peter always had to deal with this kind of harassment, but today was especially annoying. He went to the office and called the manufacturer, demanding to know why the cabinets hadn't arrived on time. He was told that the shipment would arrive later that day. He got the paperwork out so he would be ready when it arrived. Then he went to the conference room to make sure everything else would be ready. Next he walked from the conference room into the laboratory.

#### Target7

While in the laboratory, he was met by the researchers demanding cabinets for the lab, so he told them they'd get all they ordered and more in just a few hours. Then he entered the storage area, silently cursing the researchers.

#### Person6

He made sure his workers were ready for the shipment, if it ever came. Then he walked from the storage room into the repair shop.

#### Target4

He found himself also promising the foreman a cabinet for the repair shop. As he entered the lounge, he worried there wouldn't be enough cabinets to go around. He thought he'd better double check the number he had ordered. He walked from the lounge into the reception room.

#### Target1

He ran into his boss again and told him the shipment was arriving soon. Instead of thanks, the director said the workers in the experiment room had to have a cabinet. Peter left the room thinking that he couldn't win since he was sure there wouldn't be enough to go around even when the shipment arrived.

#### Story 6

Shirley was disgusted with the low wages and terrible working conditions at the research center. One day she stopped taking inventory in the storage room and looked up: The air was heavy with dust, and the room felt terribly hot. She had spoken with the director again and again, but all she ever got was words and no action. She knew many of her fellow workers were also upset, so she decided to try forming a union. She wanted to start immediately, but her only break wasn't for another two hours. She made sure the foreman wasn't looking and then slipped into the wash room where she stuffed notices into some of the lockers. Then she walked from the wash room into the lounge.

Target3

She saw several workers gathered in the lounge, so she went up to them and started complaining about working conditions. Soon she had her first converts to the union, so she went into the experiment room, reminding herself to try the same strategy on the mechanics later on. She pretended she was picking up some supplies since the head researcher looked over at her suspiciously. Then she walked from the experiment room into the office.

Target10

She needed the support of the secretaries, but they were nervous about the idea and only promised to join if everyone else did. Shirley chastised them for being so squeamish and then went into the conference room to drum up more support, but no one was there.

Person9

She sat down for a moment to decide who else to approach. Then she walked from the conference room into the laboratory.

Target7

Nobody had reacted to it, but now it was time to take action! She looked around the laboratory to make sure the head experimenter was busy, and then slipped a note to the technicians. They read the note and gave her a thumbs-up sign of approval. As she went back to work, she imagined herself as president of the new union.

## **Story 7**

Frank was the head mechanic and he spent a lot of time at work. He was there so much partly because he loved his job, but also because he didn't get along with his wife so well. One day he sat in the lounge eating lunch and fuming over the latest fight with his wife. Suddenly an assistant came in and said Frank's wife was on the phone. Frank asked the assistant to tell her that he was busy, and the man left. Now he was really distracted, and he wandered into the experiment room where he absentmindedly toyed with some equipment. Then he walked from the experiment room into the office.

Target10

He ran into the assistant, who said Frank's wife was coming down for a talk with him. Frank wanted to put some distance between himself and the front door, so he walked into the conference room. He refused to see his wife at work because he knew she would cause a big scene, so he asked the secretary to tell his wife he had left for the day. Then he walked from the conference room into the laboratory.

Target7

But he knew this would be silly, so he started looking around for a better place to hide in case his wife started to look for him. He couldn't find a good place in the laboratory, so he looked in the storage room. There were a lot of good places here, but it was too obvious a room to hide in. Next he walked from the storage room into the repair shop.

Target4

He decided to leave that for later. The repair shop was not a good hiding place either, since he knew she'd come here first.

Person4

Finally, he decided that when she showed up, he would leave through the loading dock.

## **Story 8**

Patty was very proud that she was the best shipping clerk at the center. Unfortunately, the productivity of her group had plummeted after the newest worker joined. Today she stood in the storage room, full of anger over the lazy worker. Although she had tried to cover for him, she couldn't always do both their jobs, so the group had just missed a critical deadline. Now she was going to find him and tell him to get his act together or she would go to the director. She marched into the wash room thinking he might be in there, but he wasn't. Then she walked from the wash room into the lounge.

Target3

Then she thought, if he wasn't working, maybe he was eating an early lunch in the lounge. But he wasn't there either, so she looked in the experiment room. No one in the room had seen him or knew of his whereabouts. Next she walked from the experiment room into the office.

Target10

She asked the secretary where he was, but the woman hadn't seen him either. As she entered the conference room, she realized that when she was in the reception room she hadn't seen his car in the parking lot. She began to suspect that the bum hadn't even come to work that day. She walked from the conference room into the laboratory.

Target7

In the laboratory, she cornered a friend of his and discovered that he had in fact decided to take the day off.

Person7

She decided that it was time to talk to the director.

## **Story 9**

Maria entered the repair shop and found a message saying a package had arrived for her. She thought it was probably the new equipment she had been waiting for. Looking around the repair shop, she didn't see the package.

Person4

She asked one of the workers where it was, but he said he couldn't remember. She got angry because she needed the equipment right away, so she decided to find the package herself. She looked in the lounge but didn't think the package would be there. Then she walked from the lounge into the reception room.

Target1

The receptionist remembered signing for the package, but didn't recall what happened to it after that. Maria was getting more and more impatient, so she went off in a huff to the office. She asked the secretary, who shrugged her shoulders and told her to look elsewhere since it wasn't there. So she walked from the office into the library.

Target8

Then she remembered that the package had been for someone else. She asked the librarian, who thought she had seen someone with a package heading for the laboratory sometime in the morning. Maria felt like giving up, but went into the laboratory for a quick look anyway; but again no package was around. By now she was feeling pretty disgusted with everyone. Finally, she walked from the laboratory into the wash room.

Target5

For some reason, all the lights in the wash room were off. Suddenly the lights came on and a room full of people burst into song. She realized the package had been a ruse: While she was chasing after the package, everybody had gathered in the last place she would have thought to look for the package in order to surprise her on her birthday.

## **Story 10**

As the head of research, Judy worked very hard and demanded a lot from others, which didn't make her many friends. So when she started receiving threatening notes in her mail box, she dismissed them as a feeble attempt to frighten her. Tonight she was working late in the laboratory, mixing some chemicals.

Person7

The sudden sound of a slamming door shattered her concentration. She spilled some chemicals and became angry, but her anger turned to alarm when she remembered the threats. She moved warily into the storage room, heading toward the sound and hoping to trap the intruder. Then she walked from the storage room into the repair shop.

Target4

Thinking quickly, she glanced around and saw that nothing had been disturbed in the repair shop, she grabbed a heavy wrench in case of trouble. Having heard another noise from somewhere, she was frightened into the lounge, but nothing happened. For a moment she considered leaving the building and going home, but decided she had to see if anybody was in the building. So she walked from the lounge into the reception room.

Target1

She crept across the darkened reception room and stifled a scream when she felt a sharp jab in her leg. Switching on the light, she expected a darkly clad assassin, but instead discovered that the radio had been pushed toward the doorway. She went into the office and found no one there either, so she began to feel puzzled. She walked from the office into the library.

Target8

In the library, she turned on the light and let out a yell when she saw a man slumped on the couch. He jumped up in alarm, and she recognized him as the new researcher. She apologized profusely for frightening him.

### **Story 11**

Roy was in charge of a crew hired to clean the research building. He walked around the conference room with an assistant, examining the woodwork at the base of the walls. Suddenly he let out a yell and jumped back in disgust. He pointed to a huge rat poking its head out of a hole in the woodwork. Wondering how much of the building the beasts had infested, he told his assistant they should split up and check other rooms for any signs of rats. Roy checked in the library, but didn't find a trace of the rodents. Then he walked from the library into the storage room.

Target6

Looking around the storage room, he thought that if the rats were anywhere in the room, they would be among the storage boxes, lurking in the corners. But he didn't find anything, so he went into the wash room where he thought he heard a sound.

Person5

He saw a rat scurrying toward a hole and gave chase, but he slipped on a puddle of water, cursing as he fell. Next he walked from the wash room into the lounge.

Target3

In the lounge, he sat down and rubbed his knee, then he heard a rustling sound from the far side of the room. He looked toward the repair shop and saw a misplaced rat cage under the pool table, but noticed that the cage was secure and the lab animal inside was cute and white, not ugly and black. Suddenly he realized the rats could be chewing up electrical wiring, and he got to his feet and walked inside the experiment room, but fortunately no rats were among the wires. Then he walked from the experiment room into the office.

Target10

However, he was already pretty sure that the rats had infested the whole building, and did not pursue it. When Roy met up with his assistant in the office, he grabbed a memo pad from the desk and wrote out a note informing the director of the bad news.

## **Story 12**

Howard was rewiring some equipment in the experiment room. He couldn't concentrate on his work because of a fix he got himself into: He had borrowed a lot of money from loan sharks and they wanted it back right now. Unfortunately, he didn't have nearly enough money. He was afraid that at any moment he would get a visit from those big thugs who worked for the loan shark. He was too embarrassed to ask his family for the money, so he had to find somebody at work who would help out. He went into the reception room but the receptionist had stepped out. Then he walked from the reception room into the conference room.

Target9

In the conference room, he asked a colleague if he could borrow some money for a few days and the man turned him down because he didn't want to get involved. Howard called him a coward and headed into the library in disgust. As he paced back and forth in the library, he tried to think of someone with heart as well as money. Then he walked from the library into the storage room.

Target6

Then he realized that the friend was gone, so he had to find someone else. Seeing one of the technicians, he took her aside and pleaded for a loan. She wanted to help but she had just bought a car, so she recommended that he check with the technicians in the laboratory. Since he'd already checked there, he went into the wash room, hoping to find another prospective lender, but all he got was a lecture on personal finances from the janitor. Then he walked from the wash room into the lounge.

Target3

That was stupid, however, and he started cursing himself for getting into this humiliating situation. He decided to try just one more time. He waited until everyone had left the lounge except the secretary, and then asked her, but he was turned down yet again.

Person3

He finally decided he'd have to ask his brother for the money after all. He hoped he could reach his brother before the thugs got to him.

### **Story 13**

Jennifer was one of the most successful researchers at the center. Her hard work was only exceeded by her great ambition. Today, she was running around the repair shop preparing for the last part of a huge study on isolating viruses. If the study worked, she thought she might have a shot at the Nobel Prize. She remembered there were a couple of recent reports on the virus that she wanted to study. She went inside the lounge and scoured the room to make sure that she hadn't left one of the reports lying around. Then she walked from the lounge into the reception room.

Target1

She was convinced that cleanliness was very important in biological research. She began to eat an apple she had brought from the lounge. She noticed the receptionist sneaking a candy bar and chided her for eating junk food. Then Jennifer went to the office and told the secretary to order more Petri dishes for her experiments. Next she walked from the office into the library.

Target8

Fortunately, she found both reports on the library's shelf of new arrivals and relaxed for a moment. Then she remembered that she still had to prepare for a lab meeting tomorrow morning as well as check the equipment, so she headed to the laboratory. When she discovered the technician didn't have a crucial piece of equipment ready yet, she said it better be ready the next day or he could look for another job. Then she walked from the laboratory into the wash room.

Target5

She calmed down a little when a colleague came into the wash room and said the rest of the equipment was ready.

Person5

Then she sat down, finished off the apple, and started dreaming about giving an acceptance speech for the Nobel Prize.

#### **Story 14**

Jeff worked as a messenger at the research center. His job wasn't much now, but he was very serious and intended to work his way up fast. Late one afternoon he sat in the wash room wondering how he had managed to fall in love with the new lab assistant. He smiled as he looked forward to meeting her at a restaurant later that night for their first date. Suddenly he remembered he had to work late that night. He couldn't believe how stupid he was... How could he have forgotten about his night shift when he made the date? He had to find her before she left, so he hurried into the repair shop, but she wasn't there. Next he walked from the repair shop into the experiment room.

Target2

It was then that he had persuaded her to go out with him. He forced a casual smile when the supervisor looked his way. He prayed she hadn't left for the day as he entered the reception room. The receptionist told him she had gone off to take care of one more thing before leaving. So he walked from the reception room into the conference room.

Target9

There was a woman sitting on the chair in the conference room, but when he hurried toward her, she turned around and he saw it wasn't her. He walked past the woman, pretending he had been heading toward the library all the time.

Person8

He asked the librarian, who said the lab assistant had probably already left. So Jeff walked from the library into the storage room.

Target6

However, he knew she wasn't there now, and there was no sign of her in the storage room. He had to accept the fact that he had really blown it: She had already left and now he was just making a spectacle of himself. He looked out the window just in time to see her driving out of the parking lot. He realized he didn't have her phone number, so he sat down to figure out what he was going to tell her when he called her at the restaurant later that evening.

## Story 15

Calvin was one of the janitors at the research center. He didn't like the job much, but he had to keep it because he needed the money to stay in architecture school. When he opened his locker, he noticed a note: 'Director of center has misplaced top secret report, must be found immediately!' He would have to make a thorough search of the center during his shift. He went into the repair shop, but all he could see was the greasy furnace, and no papers. So he walked from the repair shop into the experiment room.

### Target2

He hoped to receive a reward if he found the report. He switched on the light in the experiment room and began mopping the floor, keeping his eyes peeled for stray papers. He was annoyed at the mess that the researchers kept in the room: Lots of crumpled papers and trash strewn over one corner, but no report. He moved into the reception room and found that the receptionist kept a neater room than the researchers or the people in charge of the lounge. Next, he walked from the reception room into the conference room.

### Target9

But of course it wasn't there, so he trudged across the room, noticing how haphazardly the room was arranged: He would have designed it differently. He dumped trash from a waste basket and was startled to find part of the report, with jelly smeared all over it. He walked into the library to get a better look at the report, and tried to clean off some of the dirt. He wondered where the absent-minded director could have left the rest of the report. He walked from the library into the storage room.

### Target6

He glanced around the whole storage room and then headed toward a huge garbage bin. After emptying out the bin, he saw a pink box with the rest of the report stuck to half of a jelly donut.

### Person6

The crazy director must have been reading the report at breakfast and then just thrown it away without thinking.

## Story 16

Karl had been working day and night for weeks on a top secret project. Now he was totally exhausted and needed a break. So, tonight he stayed late, finishing up in the library and preparing to go to a party. As he left the building, he realized he had forgotten to lock up the report he had been working on. It would be very damaging if a rival firm got a hold of it, so he immediately turned around to go look for it. As he stepped into the office, he heard a loud crash somewhere close by and decided to investigate. He walked from the office into the library.

#### Target8

He gathered the courage to switch on the light in the library and nervously scanned the room. He ran over to the copier where he last remembered carrying the report, but it wasn't there.

#### Person8

He moved warily into the laboratory, but again found nothing. Then he walked from the laboratory into the wash room.

#### Target5

Suddenly he heard a strange clicking noise and hid behind the lockers, thinking the intruder would come in any moment. He picked up a spiked running shoe and burst into the repair shop, scaring the wits out of the janitor. When the janitor recovered, the man said he hadn't noticed anything funny, and Karl began to think the thief was a figment of his imagination. He walked from the wash room into the experiment room.

#### Target2

His thinking was interrupted by the sight of the title page of his report lying crumpled in a garbage can, and he realized that someone had indeed stolen the report. His heart sank even further when he glanced around the room and saw that one of the windows was ajar. He ran over to it and looked outside in time to see a car screeching out of the parking lot. The thief had just escaped with his report.

### **Story 17**

James arrived for work at the center even later than usual. He stumbled into the reception room, thinking he would never recover from the wild weekend. He winced when the phone rang, and vowed to cut down on partying.

#### Person1

The secretary said it was for him and he gingerly picked up the receiver. Through the static he heard a voice inform him that he was being awarded the huge research grant he had applied for last month. At first he was stunned, then the news began to sink in as he went into the office to spread the good news... but no one was there. So he walked from the office into the library.

#### Target8

He was so excited that he didn't realize he had left his briefcase on the desk. He whispered to a friend reading a report and was shushed by the librarian. So he entered the laboratory and told the technicians about the grant. He joked with them about the ways he could spend the money, and then realized he was still wearing his coat. He walked from the laboratory into the wash room.

#### Target5

He shoved his coat into his locker and left a note in the secretary's locker since he knew she would be impressed by the news. He also made a mental note to tell his friend who worked in the storage room when the man arrived, and then went on to the repair shop. He told the foreman the good news and they made plans for celebrating that night. Then he walked from the repair shop into the experiment room.

#### Target2

He thought about all the experiments he would be doing here. When he ran into the director and told him the news, the director said he could use extra space for the experiments, and also promised to come to the celebration later that night.

### **Story 18**

Jane had just become part owner of the research center. She was worried about the financial shape of the company, so she convinced the director that she should do a study at the center. She hoped to suggest ways of increasing operating efficiency and productivity. Early one morning she arrived at the center for a meeting with the director. She waited in the reception room until the director came to greet her. When they went into the office, she found out how bad the financial picture was, and she insisted on immediately finding ways to cut costs. First she walked from the office into the library.

#### Target8

She decided there was a lot of wasted space in the room, perhaps part of it could be partitioned off for storage. Continuing the tour into the laboratory, she thought the work counter could be more centrally arranged so more work could get done. She couldn't understand why the director permitted such inefficient use of space. Then she walked from the laboratory into the wash room.

#### Target5

Both the storage room and the wash room seemed functional enough to her. She entered the repair shop and shook her head in disgust: The walls were covered with dirt and the air clogged with dust.

#### Person4

She angrily jotted down some notes about how to improve conditions. Then she walked from the repair shop into the experiment room.

#### Target2

The room was a mess, and Jane was amazed that any research could get done here. She decided that the first thing was to thoroughly clean and paint the center so workers would be happier and more

productive. She prepared to discuss her suggestions with the director... She would have to convince him it was the only way to squeeze more productivity out of the decrepit organization.

### **Practice Story**

Joe's birthday was today and several of his friends at the research center were having a big party for him. The main event of the party was a treasure hunt that took place in the building. The hunt started in the conference room. Joe was told to wait in the room and he stood there impatiently. Then his best friend, dressed in a tuxedo, entered dramatically through the front door and delivered a card with the words 'Three things are certain in life: Death, taxes, and shipping & receiving.' Joe immediately headed into the library, following a hunch. Of course there was nothing hidden behind the shelves or the couch. He walked from the library into the storage room.

Target

He checked to see if his hunch about the clue was correct. Yes!... he saw a gift-wrapped package on the loading dock, and he carried it into the wash room to have a look.

Person

He tore off the wrapping and looked excitedly inside the box, but all he saw was another card: 'Fooled you bozo - Take your lunch and try again later.' He walked through the repair shop into the lounge.

Target

He checked everywhere for some kind of clue but couldn't find anything, even in the refrigerator. So instead of heading back to the repair shop, he went onto the experiment room, where one of his friends laughed and handed him another card. He knew where to go when he read 'Beware of plants bearing gifts!' He walked from the experiment room into the office.

Target

He looked at the large indoor plant in the office, and thought he saw something looped around one of its branches. He chuckled as he identified a beautiful Swiss watch dangling from the plant.

### **Comprehension Questions**

Y

Did Wilbur call all of the employees together in the library?

N

Did Wilbur dislike the wash room's dirty floor because the directors were more impressed by cleanliness than by good research?

Y

Was Wilbur dissatisfied with the way the repair shop looked?

N

Did Tina remember that she had seen a box of tubes in the experiment room?

Y

Did Tina search the experiment room in vain?

N

Did Tina find the inventory person?

Y

Did the director think that the remodeling would be easy?

N

Did Barbara enter the experiment room before the lounge?

N

Did Barbara make a note to have the cart moved to a better place?

N

Did Sandra search the conference room for her notes?

Y

Was there a sandwich in Sandra's locker?

N

Did Sandra find her notes where she had eaten in the morning?

Y

Did Peter call the manufacturer of the cabinets from the office?

Y

Did Peter promise the foreman a cabinet?

N

Was Peter in the experiment room when he met the researchers who demanded cabinets?

Y

Was the storage room dusty and hot?

N

Did Shirley convince the workers in the repair shop to join the union?

N

Did Shirley find somebody in the conference room?

N

Did Frank ask the assistant to tell his wife that he had left for the day?

Y

Was Frank in the lounge when his wife called?

N

Did Frank decide to hide in the closet?

Y

Did Patty search the worker in the wash room?

N

Did Patty remember that the worker had also messed up the delivery of the computer?

N

Did Patty see the worker's car in the parking lot?

Y

Did the receptionist remember anything about the package?

Y

Did Maria get some information about her package while she was in the library?

N

Did Maria talk to the secretary before she talked to the receptionist?

N

After having heard a door slam, did Judy begin her search for the intruder in the repair shop?

Y

Did Judy take a weapon with her from the repair shop?

Y

Was the reception room dark, when Judy entered?

N

Did Roy see a rat in the storage room?

Y

Did Roy see a rat in the lounge?

Y

Was it in the conference room that Roy had discovered the first rat?

N

Was it in the library that Howard asked a colleague to lend him money?

Y

Was the technician unable to help Howard because she had just bought a new car?

Y

Did Howard talk to the janitor while they were in the wash room?

Y

Did Jennifer find both reports on the shelf of new arrivals in the library?

N

Did Jennifer talk to the technician in the library?

Y

Did Jennifer tell the secretary to order more petrie dishes?

N

Was it in the laboratory that Jeff persuaded the lab assistant to go out with him?

N

Did Jeff see the lab assistant sitting in the conference room?

Y

Did Jeff search in the library before he searched in the storage room?

Y

Did Calvin find any papers in the experiment room?

N

After having searched the reception room for the missing report, did Calvin go into the office and discover some of the missing report in there?

N

Did Calvin find the rest of the report together with half a muffin in a garbage bin in the storage room?

Y

Did the crash that Karl heard sound like somebody knocking something over?

N

Did Karl surprise the janitor in the wash room?

Y

Did Karl look outside from the experiment room?

N

Did James receive the good news regarding his research grant while he was in the office?

Y

Did James plan to celebrate his good fortune with the foreman later that night?

N

Did James tell his friend in the storage room about his research grant?

N

Did Jane and the director meet in the office?

Y

Did the storage room and the wash room seem functional enough to Jane?

Y

After touring the building, did Jane decide that the first thing that needed to be done was to thoroughly clean and paint the center?

Y

Did Joe's treasure hunt begin in the conference room?

N

Did Joe go into the library after receiving the clue 'Three things are certain in life: Death, taxes, and overdue library fines'?

N

Did Joe find something in the lounge?

## **Anaphor Versions**

### **Story 1**

Wilbur wasn't so sure he wanted to be head of the center anymore. He had just been informed that the board of directors would be making a surprise inspection tomorrow. He immediately called all of the center's employees together in the library and told them they had less than twenty-four hours to clean up the center. He explained about the visit and said that all of their jobs were at stake. He told everyone to spread out and clean and organize every room. He went into the laboratory and made sure it was being cleaned, and then headed off to supervise the rest of the workers. He walked from the laboratory into the wash room. In order to devise a list of necessary tasks, he tried to think of everything that looked dirty or messy in the building.

### Target1

He thought that the toilet in the wash room still looked like an awful mess.

He thought that the loading dock in the storage room still looked like a mess.

He thought that the work counter in the laboratory still looked like a mess.

He thought that the shelves in the library still looked like an awful mess.

However, he was pleased to see the wash room's sparkling tile floor since he knew the directors were more impressed by cleanliness than good research. He hurried into the repair shop and yelled at the foreman for not getting those greasy machine parts out of sight. Next he thought he'd better check to see that the researchers were getting things organized. He walked from the repair shop into the experiment room. He re-checked his list of tasks to see what else needed to be done to make the research center decent-looking.

### Target2

He remembered that the blackboard in the experiment room should not be so dirty tomorrow.

He remembered that the television in the lounge should not be turned on tomorrow.

He remembered that the tools in the repair shop should not be lying around tomorrow.

He remembered that the sink in the wash room should not be so very dirty tomorrow.

Looking around the experiment room, he reminded himself to make sure the experimenters would be busy conducting studies tomorrow so the directors would see how industrious they were. As he went into the reception room, he thought about the presentation he was planning to make to the directors. Next he walked from the reception room into the conference room. He didn't want to let any uncleanliness distract the directors from his presentation, so he checked his list for things that needed to be cleaned.

### Target3

He decided that the coffee machine in the conference room needed cleaning as soon as possible.

He decided that the water fountain in the office needed cleaning as soon as possible.

He decided that the rug in the reception room needed thorough cleaning as soon as possible.

He decided that the booths in the experiment room needed thorough cleaning as soon as possible.

Sitting down at the table in the conference room, he started to write down notes for his presentation.

He imagined himself giving a high-powered talk, and began to feel the visit might go well after all.

## Story 2

Tina stood in the middle of the library, receiving a reprimand from the director. One of her duties was ordering supplies, but the test tubes she had ordered last week hadn't arrived yet. Now, the new project had to be delayed until the tubes arrived. She was angry because it wasn't her fault that the shipment hadn't arrived. She would have to find more reliable suppliers. Meanwhile, she went into the laboratory to think where she could come up with a lot of tubes fast, and it occurred to her that she might be able to scrounge up some in the building. She walked from the laboratory into the wash room. She tried to recall all the places in the center where she had ever seen boxes with tubes.

### Target1

She was sure that the week before, she had seen a box under the sink in the wash room.

She was sure that the week before, she had seen a box in the crates in the storage room.

She was sure that last week, she had seen a box beside the microscope in the laboratory.

She was sure that last week, she had seen a box beside the catalogue in the library.

However, she remembered that the box of tubes had already been used up. She was wondering where she could find some tubes when the head researcher came in to yell at her. She said it wasn't her fault since she had placed the order long ago, and then she escaped to check the repair shop. Out of desperation, she checked through some boxes behind the plywood, but found nothing. Then she walked from the repair shop into the experiment room.

### Target2

Being so desperate, she even considered searching in the booths in the experiment room.

Being so desperate, she even considered searching under the pool table in the lounge.

Being desperate, she even considered searching behind the furnace in the repair shop.

Being so desperate, she even considered searching in the lockers in the wash room.

After poking around in the corners of the experiment room and coming up empty-handed, Tina wondered how she would ever find enough tubes to keep the new project running on schedule. She went to the reception room to find the inventory person, in the hope of discovering any back stock that might have been missed during inventory. The receptionist told her that she had seen the man heading for the conference room a few hours earlier. So Tina walked from the reception room into the conference room. She knew that she had seen him a while ago and tried to recall where that had been.

### Target3

She remembered that she had seen him stick a sign on the back of the coffee machine in the conference room.

She remembered that she had seen him stick a little sign on the back of the picture in the office.

She remembered that she had seen him stick a little sign on the back of the rug in the reception room.

She remembered that she had seen him stick a little sign on the back of the speakers in the experiment room.

She couldn't find the man, so she called the supplier on the phone to complain about the delinquent shipment. They insisted that no order had ever been received. She realized her assistant had forgotten to place the order.

## Story 3

Barbara had just been hired as a consultant for remodeling the research center. She usually worked on homes, so she was nervous about this assignment. She had only accepted because the director was a good friend. She arrived early one morning and was shown into the laboratory. She was assured by the director that the job would be routine. When they went into the storage room, she looked at the stained walls and told the director she would have to see for herself what the job would be like. She walked

from the storage room into the repair shop. Since organization was one of her strong points, she started her list of tasks with things in the center that should be relocated.

#### Target1

She made a note to have the plywood in the repair shop moved to a better place.

She made a note to have the lockers in the wash room moved to a better place.

She made a note to have the crates in the storage room moved to a better place.

She made a note to have the microscope in the laboratory moved to a better place.

Looking about, she was stopped short by the sight of machine parts all over the repair shop. She fled the room and found herself in the lounge. She thought this room could be salvaged by a coat of bright paint. Next she walked from the lounge into the reception room. To complete her list, she tried to determine which things in the research center were old and useless enough to be thrown away.

#### Target2

She thought that the old radio in the reception room could be thrown out.

She thought that the speakers in the experiment room could be thrown out.

She thought that the old bed in the lounge could be thrown out.

She thought that the old cart in the repair shop could be thrown out.

In the reception room, she wanted to put some paintings on the walls and replace the furniture so that it would present a good impression to visitors. Then she walked into the office and asked the secretary how she would like the room changed. The secretary told her to buy a new desk and to get rid of the ugly picture. Then she walked from the office into the library.

#### Target3

It occurred to her that the couch in the library needed to be replaced.

It occurred to her that the chair in the conference room should be replaced.

It occurred to her that the plant in the office needed to be replaced.

It occurred to her that the lamp in the reception room should be replaced.

Walking around, she noticed that the old and tattered furniture made the library look as bad as the conference room. She thought all the rooms were either an ugly disaster or hopelessly nondescript. Then the director entered, and she accused him of not telling her just how bad this job would be.

### **Story 4**

Sandra had just been promoted to research associate at the center. Today she was nervous because she was going to have her first meeting with the director. She went into the conference room to prepare for the meeting. She reached into her briefcase for her notes and discovered to her horror that the notes were missing. She tried to calm herself and think where they might be. She entered the library, reassured by the thought that the notes had to be in the building because she had brought them with her that morning. She walked from the library into the storage room. She tried to remember where she had left her notes that morning by mentally retracing her steps.

#### Target1

She remembered that she had used the lifter in the storage room earlier that morning.  
She remembered that she had used the scales in the laboratory earlier that morning.  
She remembered that she had used the catalogue in the library earlier that morning.  
She remembered that she had used the projector in the conference room earlier that morning.

However, she was pretty sure that she hadn't left her notes there. She didn't think she left her notes among all the stored junk in the storage room, but she looked around anyway. Beginning to panic, she rushed into the wash room. She checked her locker, but all she found was a stale sandwich. Then she walked from the wash room into the lounge.

#### Target2

She wondered if she had left the notes on the pool table in the lounge.  
She wondered if she had left the notes beside the furnace in the repair shop.  
She wondered if she had left the notes beside the toilet in the wash room.  
She wondered if she had left the notes in the closet in the storage room.

However, she dismissed that thought right away and looked all over the lounge. She didn't see them so she went into the experiment room. She looked nervously through the booths, trying to recall what her notes said since she was quickly losing any hope of finding them. Finally, she walked from the experiment room into the office. She remembered looking over the notes during breakfast, so she tried to remember where that had been.

#### Target3

She recalled that in the morning, she had eaten something at the desk in the office.  
She recalled that in the morning, she had eaten at the magazine rack in the reception room.  
She recalled that in the morning, she had eaten something at the clock in the experiment room.  
She recalled that in the morning, she had eaten at the refrigerator in the lounge.

Had she left her notes there? She was overcome by relief when the secretary told her she had found the notes by the water fountain. She still had time to prepare for the meeting, so she grabbed the pages and headed back to the reception room to tell the receptionist that she would be in the conference room if the director asked.

### **Story 5**

Peter was irritated because his boss kept demanding to know why the shipment of cabinets hadn't arrived at the research center. As head of shipping and receiving, Peter always had to deal with this kind of harassment, but today was especially annoying. He went to the office and called the manufacturer, demanding to know why the cabinets hadn't arrived on time. He was told that the shipment would arrive later that day. He got the paperwork out so he would be ready when it arrived. Then he went to the conference room to make sure everything else would be ready. Next he walked from the conference room into the laboratory.

#### Target1

He wondered why the computer in the laboratory was turned off in the middle of the day.  
He wondered why the copier in the library was turned off in the middle of the day.

He wondered why the coffee machine in the conference room was turned off during the day.  
He wondered why the water fountain in the office was turned off in the middle of the day.

While in the laboratory, he was met by the researchers demanding cabinets for the lab, so he told them they'd get all they ordered and more in just a few hours. Then he entered the storage room, silently cursing the researchers. He made sure his workers were ready for the shipment, if it ever came. Then he walked from the storage room into the repair shop. He considered whether any items throughout the building needed to be replaced by new ones.

Target2

There, he thought about ordering a new cart for the repair shop.  
There, he thought about ordering a new mirror for the wash room.  
There, he thought about ordering a new lifter for the storage room.  
There, he thought about ordering new scales for the laboratory.

He found himself also promising the foreman a cabinet for the repair shop. As he entered the lounge, he worried there wouldn't be enough cabinets to go around. He thought he'd better double check the number he had ordered. He walked from the lounge into the reception room. Peter attempted to recall all of the items that he had promised to order for everyone.

Target3

He remembered he had also promised to order a dust cover for the radio in the reception room.  
He remembered he had also promised to order a dust cover for the speakers in the experiment room.  
He remembered he had also promised to order a dust cover for the television in the lounge.  
He remembered he had also promised to order a dust cover for the tools in the repair shop.

He ran into his boss again and told him the shipment was arriving soon. Instead of thanks, the director said the workers in the experiment room had to have a cabinet. Peter left the room thinking that he couldn't win since he was sure there wouldn't be enough to go around even when the shipment arrived.

## **Story 6**

Shirley was disgusted with the low wages and terrible working conditions at the research center. One day she stopped taking inventory in the storage room and looked up: The air was heavy with dust, and the room felt terribly hot. She had spoken with the director again and again, but all she ever got was words and no action. She knew many of her fellow workers were also upset, so she decided to try forming a union. She wanted to start immediately, but her only break wasn't for another two hours. She made sure the foreman wasn't looking and then slipped into the wash room where she stuffed notices into some of the lockers. Then she walked from the wash room into the lounge.

Target1

She recalled how often she had complained about the dirty refrigerator in the lounge.  
She recalled how often she had complained about the dirty furnace in the repair shop.  
She recalled how often she had complained about the dirty old mirror in the wash room.  
She recalled how often she had complained about the dirty loading dock in the storage room.

She saw several workers gathered in the lounge, so she went up to them and started complaining about working conditions. Soon she had her first converts to the union, so she went into the experiment room, reminding herself to try the same strategy on the mechanics later on. She pretended she was picking up some supplies since the head researcher looked over at her suspiciously. Then she walked from the experiment room into the office.

#### Target2

She couldn't imagine why anybody would like the ugly picture in the office.

She couldn't imagine why anybody would like the lamp in the reception room.

She couldn't imagine who would use the blackboard in the experiment room.

She couldn't imagine why anybody would use the old pool table in the lounge.

She needed the support of the secretaries, but they were nervous about the idea and only promised to join if everyone else did. Shirley chastised them for being so squeamish and then went into the conference room to drum up more support, but no one was there. She sat down for a moment to decide who else to approach. Then she walked from the conference room into the laboratory. She wondered if anyone before her had ever attempted to form a union at the research center.

#### Target3

She remembered that she had once seen a union flyer beside the microscope in the laboratory.

She remembered that she had once seen a union flyer beside the catalogue in the library.

She remembered that she had once seen a union flyer on the table in the conference room.

She remembered that she had once seen a union flyer lying on the desk in the office.

Nobody had reacted to it, but now it was time to take action! She looked around the laboratory to make sure the head experimenter was busy, and then slipped a note to the technicians. They read the note and gave her a thumbs-up sign of approval. As she went back to work, she imagined herself as president of the new union.

### **Story 7**

Frank was the head mechanic and he spent a lot of time at work. He was there so much partly because he loved his job, but also because he didn't get along with his wife so well. One day he sat in the lounge eating lunch and fuming over the latest fight with his wife. Suddenly an assistant came in and said Frank's wife was on the phone. Frank asked the assistant to tell her that he was busy, and the man left. Now he was really distracted, and he wandered into the experiment room where he absentmindedly toyed with some equipment. Then he walked from the experiment room into the office.

#### Target1

He didn't realize that he dropped a key by the water fountain in the office.

He didn't realize that he had dropped a key on the rug in the reception room.

He didn't realize that he had dropped a key in the booths in the experiment room.

He didn't realize that he had dropped one of his keys on the bed in the lounge.

He ran into the assistant, who said Frank's wife was coming down for a talk with him. Frank wanted to put some distance between himself and the front door, so he walked into the conference room. He

refused to see his wife at work because he knew she would cause a big scene, so he asked the secretary to tell his wife he had left for the day. Then he walked from the conference room into the laboratory. Frank tried to think of a place in the building where he could hide from his wife.

Target2

For a moment, he considered hiding under the work counter in the laboratory.

For a moment, he considered hiding behind the shelves in the library.

For a moment, he considered hiding behind the chair in the conference room.

For a moment, he considered hiding behind the plant in the office.

But he knew this would be silly, so he started looking around for a better place to hide in case his wife started to look for him. He couldn't find a good place in the laboratory, so he looked in the storage room. There were a lot of good places here, but it was too obvious a room to hide in. Next he walked from the storage room into the repair shop. He hated to waste his time playing hide-and-seek with his wife and thought about all the work he had planned to get done that day.

Target3

He remembered that he had planned to check the furnace in the repair shop that day.

He remembered that he had planned to check the sink in the wash room that day.

He remembered that he had planned to check the closet in the storage room that day.

He remembered that he had planned to check the computer in the laboratory that day.

He decided to leave that for later. The repair shop was not a good hiding place either, since he knew she'd come here first. Finally, he decided that when she showed up, he would leave through the loading dock.

## **Story 8**

Patty was very proud that she was the best shipping clerk at the center. Unfortunately, the productivity of her group had plummeted after the newest worker joined. Today she stood in the storage room, full of anger over the lazy worker. Although she had tried to cover for him, she couldn't always do both their jobs, so the group had just missed a critical deadline. Now she was going to find him and tell him to get his act together or she would go to the director. She marched into the wash room thinking he might be in there, but he wasn't. Then she walked from the wash room into the lounge. She tried to remember the places where she usually found him slacking off on the job.

Target1

She recalled that twice she had found him around the television in the lounge.

She recalled that twice she had found him on the plywood in the repair shop.

She recalled that twice she had found him around the lockers in the wash room.

She recalled that twice she had found him at the crates in the storage room.

Then she thought, if he wasn't working, maybe he was eating an early lunch in the lounge. But he wasn't there either, so she looked in the experiment room. No one in the room had seen him or knew of his whereabouts. Next she walked from the experiment room into the office.

Target2

She remembered that the guy had also messed up the delivery of the desk in the office.  
She remembered that the guy had also messed up the delivery of the radio in the reception room.  
She remembered that the guy had also messed up the delivery of the speakers in the experiment room.  
She remembered the guy had also messed up the delivery of the refrigerator in the lounge.

She asked the secretary where he was, but the woman hadn't seen him either. As she entered the conference room, she realized that when she was in the reception room she hadn't seen his car in the parking lot. She began to suspect that the bum hadn't even come to work that day. She walked from the conference room into the laboratory. She wondered which kind of unpleasant task she could use to reprimand him for not getting his work done.

Target3

She decided to give him the tough job of cleaning the scales in the laboratory.  
She decided to give him the tough job of cleaning the couch in the library.  
She decided to give him the tough job of cleaning the projector in the conference room.  
She decided to give him the tough job of cleaning the picture in the office.

In the laboratory, she cornered a friend of his and discovered that he had in fact decided to take the day off. She decided that it was time to talk to the director.

### **Story 9**

Maria entered the repair shop and found a message saying a package had arrived for her. She thought it was probably the new equipment she had been waiting for. Looking around the repair shop, she didn't see the package. She asked one of the workers where it was, but he said he couldn't remember. She got angry because she needed the equipment right away, so she decided to find the package herself. She looked in the lounge but didn't think the package would be there. Then she walked from the lounge into the reception room.

Target1

She recalled how another package had ended up on the magazine rack in the reception room.  
She recalled how another package had ended up behind the clock in the experiment room.  
She recalled how another package had ended up in the refrigerator in the lounge.  
She recalled how another package had ended up among the plywood in the repair shop.

The receptionist remembered signing for the package, but didn't recall what happened to it after that. Maria was getting more and more impatient, so she went off in a huff to the office. She asked the secretary, who shrugged her shoulders and told her to look elsewhere since it wasn't there. So she walked from the office into the library. She knew that she had seen a package earlier that day and tried hard to recall where that had been.

Target2

She remembered that she had seen a package on the copier in the library.  
She remembered that she had seen a package on the table in the conference room.  
She remembered that she had seen a package below the picture in the office.  
She remembered that she had seen a package beside the rug in the reception room.

Then she remembered that the package had been for someone else. She asked the librarian, who thought she had seen someone with a package heading for the laboratory sometime in the morning. Maria felt like giving up, but went into the laboratory for a quick look anyway; but again no package was around. By now she was feeling pretty disgusted with everyone. Finally, she walked from the laboratory into the wash room. She started to suspect that some fool had taken her package to hide it somewhere in the building.

Target3

Maybe someone had hidden her package in a strange place, like in the lockers in the wash room.

Maybe someone had hidden her package in a strange place, like in the closet in the storage room.

Maybe someone had hidden her package in a strange place, like on the computer in the laboratory.

Maybe someone had hidden her package in a strange place, like under the couch in the library.

For some reason, all the lights in the wash room were off. Suddenly the lights came on and a room full of people burst into song. She realized the package had been a ruse: While she was chasing after the package, everybody had gathered in the last place she would have thought to look for the package in order to surprise her on her birthday.

### **Story 10**

As the head of research, Judy worked very hard and demanded a lot from others, which didn't make her many friends. So when she started receiving threatening notes in her mail box, she dismissed them as a feeble attempt to frighten her. Tonight she was working late in the laboratory, mixing some chemicals. The sudden sound of a slamming door shattered her concentration. She spilled some chemicals and became angry, but her anger turned to alarm when she remembered the threats. She moved warily into the storage room, heading toward the sound and hoping to trap the intruder. Then she walked from the storage room into the repair shop. There she stopped and stood silently, waiting for another sound.

Target1

She heard a soft sound that seemed to come from the tools in the repair shop.

She heard a soft sound that seemed to come from the toilet in the wash room.

She heard a sound that seemed to come from the loading dock in the storage room.

She heard a sound that seemed to come from the work counter in the laboratory.

Thinking quickly, she glanced around and saw that nothing had been disturbed in the repair shop, she grabbed a heavy wrench in case of trouble. Having heard another noise from somewhere, she was frightened into the lounge, but nothing happened. For a moment she considered leaving the building and going home, but decided she had to see if anybody was in the building. So she walked from the lounge into the reception room. She started to fear that someone might be waiting for her to attack her somewhere in the building.

Target2

She imagined that somebody might suddenly attack her with the lamp in the reception room.

She imagined that somebody might suddenly attack her from the booths in the experiment room.

She imagined that somebody might attack her from below the pool table in the lounge.

She imagined that somebody might suddenly attack her with the cart from the repair shop.

She crept across the darkened reception room and stifled a scream when she felt a sharp jab in her leg. Switching on the light, she expected a darkly clad assassin, but instead discovered that the radio had been pushed toward the doorway. She went into the office and found no one there either, so she began to feel puzzled. She walked from the office into the library. As she continued her search, she strained to hear for any more sounds.

Target3

She thought she heard a faint sound coming from the shelves in the library.

She thought she heard a sound coming from the coffee machine in the conference room.

She thought she heard a sound coming from the water fountain in the office.

She thought she heard a sound coming from the magazine rack in the reception room.

In the library, she turned on the light and let out a yell when she saw a man slumped on the couch. He jumped up in alarm, and she recognized him as the new researcher. She apologized profusely for frightening him.

### **Story 11**

Roy was in charge of a crew hired to clean the research building. He walked around the conference room with an assistant, examining the woodwork at the base of the walls. Suddenly he let out a yell and jumped back in disgust. He pointed to a huge rat poking its head out of a hole in the woodwork. Wondering how much of the building the beasts had infested, he told his assistant they should split up and check other rooms for any signs of rats. Roy checked in the library, but didn't find a trace of the rodents. Then he walked from the library into the storage room. There, he stopped and imagined all the dark corners of the research center where rats might be hiding.

Target1

He thought the corner behind the closet in the storage room would be a nice place for rats.

He thought the corner behind the microscope in the laboratory would be a nice place for rats.

He thought the corner behind the copier in the library would be a nice hiding place for rats.

He thought the corner behind the projector in the conference room would be a nice place for rats.

Looking around the storage room, he thought that if the rats were anywhere in the room, they would be among the storage boxes, lurking in the corners. But he didn't find anything, so he went into the wash room where he thought he heard a sound. He saw a rat scurrying toward a hole and gave chase, but he slipped on a puddle of water, cursing as he fell. Next he walked from the wash room into the lounge.

Target2

He imagined even more rats might be hiding under the bed in the lounge.

He imagined even more rats might be hiding under the cart in the repair shop.

He imagined even more rats might be hiding under the sink in the wash room.

He imagined even more rats might hide under the lifter in the storage room.

In the lounge, he sat down and rubbed his knee, then he heard a rustling sound from the far side of the room. He looked toward the repair shop and saw a misplaced rat cage under the pool table, but noticed that the cage was secure and the lab animal inside was cute and white, not ugly and black. Suddenly he realized the rats could be chewing up electrical wiring, and he got to his feet and walked inside the experiment room, but fortunately no rats were among the wires. Then he walked from the experiment room into the office. He paused for a moment to ask himself if he had really checked every possible hiding place in the building.

Target3

Suddenly he remembered that he hadn't checked the dark corner behind the plant in the office.

Suddenly he remembered that he hadn't checked the corner behind the magazine rack in the reception room.

Suddenly he remembered that he hadn't checked the dark corner behind the clock in the experiment room.

Suddenly he remembered that he hadn't checked the corner behind the television in the lounge.

However, he was already pretty sure that the rats had infested the whole building, and did not pursue it. When Roy met up with his assistant in the office, he grabbed a memo pad from the desk and wrote out a note informing the director of the bad news.

## Story 12

Howard was rewiring some equipment in the experiment room. He couldn't concentrate on his work because of a fix he got himself into: He had borrowed a lot of money from loan sharks and they wanted it back right now. Unfortunately, he didn't have nearly enough money. He was afraid that at any moment he would get a visit from those big thugs who worked for the loan shark. He was too embarrassed to ask his family for the money, so he had to find somebody at work who would help out. He went into the reception room but the receptionist had stepped out. Then he walked from the reception room into the conference room.

Target1

He didn't realize that he left his screw driver on the table in the conference room.

He didn't realize that he had left his screw driver on the desk in the office.

He didn't realize he had left his screw driver beside the lamp in the reception room.

He didn't realize he had left his screw driver beside the blackboard in the experiment room.

In the conference room, he asked a colleague if he could borrow some money for a few days and the man turned him down because he didn't want to get involved. Howard called him a coward and headed into the library in disgust. As he paced back and forth in the library, he tried to think of someone with heart as well as money. Then he walked from the library into the storage room. Howard tried to remember if and where he had seen any of his closer friends who might be willing help him out.

Target2

He remembered that he had seen a friend at the crates in the storage room earlier that day.

He remembered that he had seen a friend at the computer in the laboratory earlier that day.

He remembered that he had seen a friend at the shelves in the library earlier that day.

He remembered he had seen a friend at the coffee machine in the conference room earlier that day.

Then he realized that the friend was gone, so he had to find someone else. Seeing one of the technicians, he took her aside and pleaded for a loan. She wanted to help but she had just bought a car, so she recommended that he check with the technicians in the laboratory. Since he'd already checked there, he went into the wash room, hoping to find another prospective lender, but all he got was a lecture on personal finances from the janitor. Then he walked from the wash room into the lounge. By now, he was so desperate that he started to think about places where he could hide from the thugs.

Target3

For a moment, he imagined hiding under the pool table in the lounge.

For a moment, he imagined he could hide behind the tools in the repair shop.

For a moment, he imagined he could hide in the toilet in the wash room.

For a moment, he imagined he could hide in the closet in the storage room.

That was stupid, however, and he started cursing himself for getting into this humiliating situation. He decided to try just one more time. He waited until everyone had left the lounge except the secretary, and then asked her, but he was turned down yet again. He finally decided he'd have to ask his brother for the money after all. He hoped he could reach his brother before the thugs got to him.

### **Story 13**

Jennifer was one of the most successful researchers at the center. Her hard work was only exceeded by her great ambition. Today, she was running around the repair shop preparing for the last part of a huge study on isolating viruses. If the study worked, she thought she might have a shot at the Nobel Prize. She remembered there were a couple of recent reports on the virus that she wanted to study. She went inside the lounge and scoured the room to make sure that she hadn't left one of the reports lying around. Then she walked from the lounge into the reception room.

Target1

She wondered if anyone had ever cleaned the old rug in the reception room.

She wondered if anyone had ever cleaned the blackboard in the experiment room.

She wondered if anyone had ever cleaned the old bed in the lounge.

She wondered if anyone had ever cleaned the furnace in the repair shop.

She was convinced that cleanliness was very important in biological research. She began to eat an apple she had brought from the lounge. She noticed the receptionist sneaking a candy bar and chided her for eating junk food. Then Jennifer went to the office and told the secretary to order more Petri dishes for her experiments. Next she walked from the office into the library. She tried to think of all the places where she might possibly have left the reports.

Target2

She remembered that she might have left the reports on the catalogue in the library.

She remembered that she might have left the reports beside the projector in the conference room.

She remembered that she might have left the reports on the desk in the office.

She remembered that she might have left the reports beside the radio in the reception room.

Fortunately, she found both reports on the library's shelf of new arrivals and relaxed for a moment. Then she remembered that she still had to prepare for a lab meeting tomorrow morning as well as check the equipment, so she headed to the laboratory. When she discovered the technician didn't have a crucial piece of equipment ready yet, she said it better be ready the next day or he could look for another job. Then she walked from the laboratory into the wash room.

#### Target3

She decided to have the mirror in the wash room cleaned because it was very dirty.  
She decided to have the crates in the storage room cleaned because they were very dirty.  
She decided to have the microscope in the laboratory cleaned because it was very dirty.  
She decided to have the copier in the library cleaned because it was very dirty.

She calmed down a little when a colleague came into the wash room and said the rest of the equipment was ready. Then she sat down, finished off the apple, and started dreaming about giving an acceptance speech for the Nobel Prize.

### **Story 14**

Jeff worked as a messenger at the research center. His job wasn't much now, but he was very serious and intended to work his way up fast. Late one afternoon he sat in the wash room wondering how he had managed to fall in love with the new lab assistant. He smiled as he looked forward to meeting her at a restaurant later that night for their first date. Suddenly he remembered he had to work late that night. He couldn't believe how stupid he was... How could he have forgotten about his night shift when he made the date? He had to find her before she left, so he hurried into the repair shop, but she wasn't there. Next he walked from the repair shop into the experiment room. Cursing himself, he tried to think of where in the whole building she might be.

#### Target1

He remembered that he had met her at the speakers in the experiment room earlier that day.  
He remembered that he had met her at the refrigerator in the lounge earlier that day.  
He remembered that he had met her at the plywood in the repair shop earlier that day.  
He remembered that he had met her at the lockers in the wash room earlier that day.

It was then that he had persuaded her to go out with him. He forced a casual smile when the supervisor looked his way. He prayed she hadn't left for the day as he entered the reception room. The receptionist told him she had gone off to take care of one more thing before leaving. So he walked from the reception room into the conference room. He was relieved to hear that she was still in the building, and began imagining how he would find her.

#### Target2

He imagined how he would find her sitting on the chair in the conference room.  
He imagined that he would find her standing beside the plant in the office.  
He imagined he would find her standing beside the radio in the reception room.  
He imagined he would find her standing beside the clock in the experiment room.

There was a woman sitting on the chair in the conference room, but when he hurried toward her, she turned around and he saw it wasn't her. He walked past the woman, pretending he had been heading toward the library all the time. He asked the librarian, who said the lab assistant had probably already left. So Jeff walked from the library into the storage room. Jeff didn't want to give up and tried to remember where he had seen her most often.

#### Target3

He recalled he had often seen her standing at the loading dock in the storage room.

He recalled he had often seen her standing at the work counter in the laboratory.

He recalled that he had often seen her sitting on the couch in the library.

He recalled that he had often seen her sitting at the table in the conference room.

However, he knew she wasn't there now, and there was no sign of her in the storage room. He had to accept the fact that he had really blown it: She had already left and now he was just making a spectacle of himself. He looked out the window just in time to see her driving out of the parking lot. He realized he didn't have her phone number, so he sat down to figure out what he was going to tell her when he called her at the restaurant later that evening.

#### Story 15

Calvin was one of the janitors at the research center. Tonight he slowly changed into his work clothes in the wash room. He didn't like the job much, but he had to keep it because he needed the money to stay in architecture school. When he opened his locker, he noticed a note: 'Director of center has misplaced top secret report, must be found immediately!' He would have to make a thorough search of the center during his shift. He went into the repair shop, but all he could see was the greasy furnace, and no papers. So he walked from the repair shop into the experiment room. He couldn't find any papers there and began to suspect that somebody might have hidden the report on purpose.

#### Target1

He dreamt about finding the report behind the clock in the experiment room.

He dreamt about finding the report under the bed in the lounge.

He dreamt about finding the report under the cart in the repair shop.

He dreamt about finding the report below the mirror in the wash room.

He hoped to receive a reward if he found the report. He switched on the light in the experiment room and began mopping the floor, keeping his eyes peeled for stray papers. He was annoyed at the mess that the researchers kept in the room: Lots of crumpled papers and trash strewn over one corner, but no report. He moved into the reception room and found that the receptionist kept a neater room than the researchers or the people in charge of the lounge. Next, he walked from the reception room into the conference room.

#### Target2

He wondered if someone might have hidden the report behind the projector in the conference room.

He wondered if someone might have hidden the report behind the picture in the office.

He wondered if someone had hidden the report behind the magazine rack in the reception room.

He wondered if someone might have hidden the report in the booths in the experiment room.

But of course it wasn't there, so he trudged across the room, noticing how haphazardly the room was arranged: He would have designed it differently. He dumped trash from a waste basket and was startled to find part of the report, with jelly smeared all over it. He walked into the library to get a better look at the report, and tried to clean off some of the dirt. He wondered where the absent-minded director could have left the rest of the report. He walked from the library into the storage room.

Target3

He thought that the rest could be anywhere, even on the lifter in the storage room.

He thought that the rest could be anywhere, even on the scales in the laboratory.

He thought that the rest could be anywhere, even in the catalogue in the library.

He thought that the rest could be anywhere, even under the chair in the conference room.

He glanced around the whole storage room and then headed toward a huge garbage bin. After emptying out the bin, he saw a pink box with the rest of the report stuck to half of a jelly donut. The crazy director must have been reading the report at breakfast and then just thrown it away without thinking.

### **Story 16**

Karl had been working day and night for weeks on a top secret project. Now he was totally exhausted and needed a break. So, tonight he stayed late, finishing up in the library and preparing to go to a party. As he left the building, he realized he had forgotten to lock up the report he had been working on. It would be very damaging if a rival firm got a hold of it, so he immediately turned around to go look for it. As he stepped into the office, he heard a loud crash somewhere close by and decided to investigate. He walked from the office into the library. Karl wondered what could have caused that crashing noise.

Target1

The crash sounded like someone knocked the couch over in the library.

The crash sounded like someone knocked the chair over in the conference room.

The crash sounded like someone knocked the plant over in the office.

The crash sounded like someone knocked the lamp over in the reception room.

He gathered the courage to switch on the light in the library and nervously scanned the room. He ran over to the copier where he last remembered carrying the report, but it wasn't there. He moved warily into the laboratory, but again found nothing. Then he walked from the laboratory into the wash room. He tried very hard to remember where he had been with the report.

Target2

He recalled that he had been at the sink in the wash room, carrying his report.

He recalled that he had been at the lifter in the storage room, carrying his report.

He recalled that he had been at the scales in the laboratory, carrying his report.

He recalled that he had been at the shelves in the library, carrying his report.

Suddenly he heard a strange clicking noise and hid behind the lockers, thinking the intruder would come in any moment. He picked up a spiked running shoe and burst into the repair shop, scaring the wits out of the janitor. When the janitor recovered, the man said he hadn't noticed anything funny, and Karl

began to think the thief was a figment of his imagination. He walked from the repair shop into the experiment room.

### Target3

It occurred to him he might have left the report below the blackboard in the experiment room.

It occurred to him that he might have left the report on the television in the lounge.

It occurred to him that he might have left the report among the tools in the repair shop.

It occurred to him that he might have left the report next to the toilet in the wash room.

His thinking was interrupted by the sight of the title page of his report lying crumpled in a garbage can, and he realized that someone had indeed stolen the report. His heart sank even further when he glanced around the room and saw that one of the windows was ajar. He ran over to it and looked outside in time to see a car screeching out of the parking lot. The thief had just escaped with his report.

### Practice 1

Joe's birthday was today and several of his friends at the research center were having a big party for him. The main event of the party was a treasure hunt that took place in the building. The hunt started in the conference room. Joe was told to wait in the room and he stood there impatiently. Then his best friend, dressed in a tuxedo, entered dramatically through the front door and delivered a card with the words 'Three things are certain in life: Death, taxes, and shipping & receiving.' Joe immediately headed into the library, following a hunch. Of course there was nothing hidden behind the shelves or the couch. He walked from the library into the storage room. He checked to see if his hunch about the clue was correct. Yes!... he saw a gift-wrapped package on the loading dock, and he carried it into the wash room to have a look. He tore off the wrapping and looked excitedly inside the box, but all he saw was another card: 'Fooled you bozo - Take your lunch and try again later.' He walked from the wash room into the lounge. He checked everywhere for some kind of clue but couldn't find anything, even in the refrigerator. So instead of heading back to the repair shop, he went onto the experiment room, where one of his friends laughed and handed him another card. He knew where to go when he read 'Beware of plants bearing gifts!' He walked from the experiment room into the office. He looked at the large indoor plant in the office, and thought he saw something looped around one of its branches. He chuckled as he identified a beautiful Swiss watch dangling from the plant.

### Practice 2

James arrived for work at the center even later than usual. He stumbled into the reception room, thinking he would never recover from the wild weekend. He winced when the phone rang, and vowed to cut down on partying. The secretary said it was for him and he gingerly picked up the receiver. Through the static he heard a voice inform him that he was being awarded the huge research grant he had applied for last month. At first he was stunned, then the news began to sink in as he went into the office to spread the good news... but no one was there. So he walked from the office into the library. He was so excited that he didn't realize he had left his briefcase on the desk. He whispered to a friend reading a report and was shushed by the librarian. So he entered the laboratory and told the technicians about the grant. He joked with them about the ways he could spend the money, and then realized he was still wearing his coat. He walked from the laboratory into the wash room. He shoved his coat into his locker

and left a note in the secretary's locker since he knew she would be impressed by the news. He also made a mental note to tell his friend who worked in the storage room when the man arrived, and then went on to the repair shop. He told the foreman the good news and they made plans for celebrating that night. Then he walked from the repair shop into the experiment room. He thought about all the experiments he would be doing here. When he ran into the director and told him the news, the director said he could use extra space for the experiments, and also promised to come to the celebration later that night.

### **Practice 3**

Jane had just become part owner of the research center. She was worried about the financial shape of the company, so she convinced the director that she should do a study at the center. She hoped to suggest ways of increasing operating efficiency and productivity. Early one morning she arrived at the center for a meeting with the director. She waited in the reception room until the director came to greet her. When they went into the office, she found out how bad the financial picture was, and she insisted on immediately finding ways to cut costs. First she walked from the office into the library. She decided there was a lot of wasted space in the room, perhaps part of it could be partitioned off for storage. Continuing the tour into the laboratory, she thought the work counter could be more centrally arranged so more work could get done. She couldn't understand why the director permitted such inefficient use of space. Then she walked from the laboratory into the wash room. Both the storage room and the wash room seemed functional enough to her. She entered the repair shop and shook her head in disgust: The walls were covered with dirt and the air clogged with dust. She angrily jotted down some notes about how to improve conditions. Then she walked from the repair shop into the experiment room. The room was a mess, and Jane was amazed that any research could get done here. She decided that the first thing was to thoroughly clean and paint the center so workers would be happier and more productive. She prepared to discuss her suggestions with the director... She would have to convince him it was the only way to squeeze more productivity out of the decrepit organization.