Level E, lesson 62  In exercise 1, students identify nouns in subjects that have more than one noun (the batch of cookies). For three exercises in this lesson, students make inferences. In exercise 2, they read statements that people made and infer if-then rules. (Mrs. Finch said, “The weather will change because there is a halo around the moon.”). In exercise 3, students construct a deduction that begins with an if-then rule. In exercise 4, students explain the problem with an account that has an improbable conclusion. Students follow an outline diagram to present an inference that is more probable than the one expressed in the account they read. For exercise 5, students rewrite arguments that are faulty because they have a conclusion that is more general than the evidence.

(Student materials are shown in reduced size.)
• We can't prove that it didn't happen that way. We just don't have any reason to believe that it did happen that way. There's no evidence in the picture to lead to the inference that there were horses in the campground or that there were giants or that anybody said, "Have a good day."

3. Look at the outline diagram. You'll first write about what Blinky inferred.
• Try to write one sentence that summarizes the important details, but if you need a second sentence, write it. Raise your hand when you've written about Blinky's inference.

(Observable students and give feedback.)
• Here's a good summary of what Blinky inferred:

Blinky inferred that two giants on horseback tied the clothesline to the tree branch; however, that inference is not probable.

• Here's another good summary:

Blinky inferred that two giants riding horses threw the clothes on the ground and tied the clothesline to the tree; however, that inference is not probable.

(Call on several students to read their account. Praise accounts that tell about the giants on horseback tying the clothesline to the tree branch.)

4. Now you'll write a more probable inference is that and explain the more probable inference. A more probable inference is one that uses the clues in the picture but doesn't refer to things that didn't leave clues.
• Write your sentences for that part of the X box.
• Listen: After you write a more probable inference is that, don't use the word probably again. Just tell what happened. Raise your hand when you're finished.

(Observable students and give feedback.)

• Here's a good explanation:

A more probable inference is that Lisa took down the clothes, untied the clothesline, climbed the tree and tied one end of the clothesline to the tree branch.

• (Call on several students to read their accounts. Praise explanations that refer to the various things that Lisa probably did and that do not use the word probable or probably in the student-constructed wording.)

EXERCISE 5

CRITIQUING

More General Conclusions

1. Find part F.
• Some of these arguments are upside-down. Those arguments have a conclusion that is more general than the evidence.
• For each argument in part F, write more general or more specific to tell about the conclusion. Then rewrite those arguments that have a conclusion that is more general than the evidence.
• Raise your hand when you're finished.

(Observable students and give feedback.)

2. Argument 1: Mrs. Smith makes clothes for all of her children. Meg is one of Mrs. Smith's children. Therefore, Mrs. Smith makes clothes for Meg.
• Tell me about the conclusion. (Signal.) More specific.
• You didn't have to rewrite that argument because it is not faulty.

3. Argument 2: Jane is rich. Jane is from Billtown. Therefore, everyone in Billtown must be rich.
• Tell me about the conclusion. (Signal.) More general.
• That argument is upside-down. Here's what you should have for the right-side-up argument:

Everyone in Billtown is rich.
Jane is from Billtown.
Therefore, Jane must be rich.
• Raise your hand if you got it right.
Part F
For each argument, write more specific or more general to tell about the conclusion. Then rewrite these arguments that have a conclusion that is more general than the evidence.

Argument 1: Mrs. Smith makes clothes for all of her children. Meg is one of Mrs. Smith's children. Therefore, Mrs. Smith makes clothes for Meg.

Argument 2: Jane is rich. Jane is from Billtown. Therefore, everyone in Billtown must be rich.

Argument 3: It rained on Tuesday. Tuesday was the fourth day in March. Therefore, it rained on all the days in March.

Argument 4: Every tide pool is full of living things. There are tidepools in Bay City. Therefore, all the tide pools in Bay City are full of living things.

Independent Work

Part G
Use who or that to combine the sentences in each item.

1. The men were cold. The men were working on top of the tower.
2. We went to the park. The park was near our house.
3. They looked at the mountains. The mountains were 50 miles away.
4. The girls were proud. Those girls won the contest.

Part H
Write about the problem with this argument.

Argument: Crickets make noise at night. There was a lot of noise last night. Therefore, there must have been a lot of crickets out last night.

Part I
Follow the outline diagram and write two paragraphs about the most practical plan for Hilda.

Goal
Hilda's goal is to have a new car.

Here are facts about Hilda:
- Hilda is 18 years old.
- She has saved $17.50.
- She does not have a job.
- She is very talented and could easily work as an artist.
- The car she wants costs $34,800.

Possible ways that Hilda could buy a car:

Plan 1 (Marrying): Marry a millionaire and have him buy the car.

Plan 2 (Getting a job): Get a job as an artist and save enough money to make payments on the car.

Plan 3 (Waiting for a gift): Wait for somebody to give her the money.

Outline diagram

<table>
<thead>
<tr>
<th>Only one plan is practical.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paragraph 1</td>
</tr>
<tr>
<td>practical because:</td>
</tr>
<tr>
<td>Also,</td>
</tr>
<tr>
<td>practical because:</td>
</tr>
<tr>
<td>Paragraph 2</td>
</tr>
<tr>
<td>The most practical plan is for Hilda to</td>
</tr>
<tr>
<td>The plan has these advantages:</td>
</tr>
</tbody>
</table>

Sample Lesson 62, Level E 101
Lesson 62

Objectives

- Identify the nouns in subjects that have the word of, on or in. (Exercise 1)
- Infer a general if rule from a more specific statement that has the word because. (Exercise 2)
- Write a three-statement deduction that begins with an if rule. (Exercise 3) 
  Note: Students work from statements that people make. These statements have the word because: I know that Bill works with his hands because his hands are very hard. Students write: If a person has hands that are very hard, the person works with his hands. Bill has hands that are very hard. Therefore, Bill works with his hands.

- Explain the problem with accounts that present improbable inferences. (Exercise 4) Note: Students work from a picture sequence that has a missing middle picture. They compare an elaborate account inferring what happened in the missing picture with the visible details of the pictures. Then they critique the account.
- Identify arguments that are faulty because the conclusion is more general than the corresponding evidence. (Exercise 5)

Textbook Lined Paper

EXERCISE 1

PARTS OF SPEECH
Nouns in the Subject

1. Open your book to lesson 62 and find part A.
   - Some of these sentences have a main noun and another noun in the subject.
   - You've worked with subjects that have a main noun and another noun. The first noun is the main noun. That's the word just before of in the sentences you worked with.
   - Subjects that have the word on or in work the same way. The main noun is the word that comes just before on or in.

2. Sentence 1: The shingles on the roof started sliding.
   - What's the whole subject? (Signal.) The shingles on the roof.
   - The main noun is the first noun. What's the main noun? (Signal.) Shingles.
   - What's the other noun? (Signal.) Roof. (Repeat step 2 until firm.)

3. For each item in part A, write the subject and write N above each noun.
   - Raise your hand when you're finished. (Observe students and give feedback.)

4. Check your work.
   - Sentence 1: The shingles on the roof started sliding.
   - What's the subject? (Signal.) The shingles on the roof.
   - What are the two nouns? (Signal.) Shingles and roof.
EXERCISE 2
INFERRING RULES
Writing the Rule

1. Find part B.
   - These are statements that people made. For each statement, you can figure out the rule that begins with if. That's the general rule the person uses.
   - Remember, start with the part that begins with the word because and make that part the part of your rule that begins with if.

2. Item 1: Rita said, "I know Jimmy will get rich because he has rich relatives."
   - Read the part that begins with because. Figure out how to make it general. Start with the word if and write Rita's general rule.
   - Raise your hand when you're finished. (Observe students and give feedback.)

EXERCISE 3
INFERRING RULES
Writing the Deduction

1. Find part C.
   - For each sentence in part C, you're going to write a three-sentence deduction. Your first sentence will be an if rule. Your second sentence will be a fact. Your third sentence will be the conclusion.
2. We'll do the sample item together: Peter said, "I know Alice is mad because she is frowning."
- Your turn: Write the general rule that Peter is using. Raise your hand when you've done that much.
  (Observe students and give feedback.)
- (Write on the board:)

  If a person is frowning, that person is mad.

- Here's a good general rule.
- The next sentence of our deduction is a fact. That fact should tell about somebody frowning. What is the fact that Peter used when he said, "I know Alice is mad because she is frowning"?
- (Call on a student.) Alice is frowning.
- Write this sentence under the rule Alice is frowning. Then write the conclusion. Remember to start the conclusion with therefore.
- (Write to show:)

  If a person is frowning, that person is mad.

  Alice is frowning.
  Therefore, Alice is mad.

- Here's the whole deduction:
  If a person is frowning, that person is mad.
  Alice is frowning.
  Therefore, Alice is mad.
- Raise your hand if you wrote that deduction.

3. Item 1: Heather said, "I know Mr. Green is rich because he drives an expensive car."
- Write Heather's general rule. Raise your hand when you've done that much.
  (Observe students and give feedback.)
- Here's a good general rule:
  If somebody drives an expensive car, that person is rich.
- Or you could say:
  If a person drives an expensive car, that person is rich.
- The next sentence is the fact that Heather used. That fact tells about somebody driving an expensive car.
- Write the fact. Then write the conclusion. Raise your hand when you're finished.
  (Observe students and give feedback.)
- I'll say the whole deduction:
  If somebody drives an expensive car, that person is rich.
  Mr. Green drives an expensive car.
  Therefore, Mr. Green is rich.
- Raise your hand if you wrote that deduction or one that is almost like it.
  (Call on students to read their deduction. Praise deductions that are close to your model.)

4. Item 2: Denny said, "Today will be a bad day because it is Friday the 13th."
- Write Denny's general rule. Write the fact that Denny uses; then write the conclusion. Raise your hand when you're finished.
  (Observe students and give feedback.)
- Here's a good deduction:
  If a day is Friday the 13th, it will be a bad day.
  Today is Friday the 13th.
  Therefore, today will be a bad day.
- Or your rule could be:
  If it's Friday the 13th, it will be a bad day.
- Raise your hand if you wrote a deduction like that or almost like that.
  (Call on students to read their deductions. Praise deductions that are close to your model.)
EXERCISE 4
PICTURE INFERENCE
Writing More-Probable Inferences

1. Find part D.
   - (Teacher reference:)

   I'll read what it says. Follow along:
   - For some of the work you'll do, you'll draw inferences.
   - Inferences are like conclusions. When you don't know exactly what happened but you use clues to figure out what you think happened, you're drawing an inference, or inferring.
   - If you see a dent in a car and if that dent has red paint on it, you could draw the inference that a red vehicle banged into the car. You could be wrong because the paint may have been on the car before the dent was created. But if you use the clues that are present to figure out what probably happened, you're drawing a reasonable inference.
   - Look at the picture of Peter.
   - You know how to infer Peter's rule from what he is saying. "I know Alice is mad because she is frowning."

   - What's Peter's rule? (Call on a student. Idea: If somebody frowns, the person is mad.)

   - (Teacher reference:)

   - Look at the picture of the footprints. Those footprints match Jimmy's shoes.
   - We can infer that Jimmy made those prints, but we can't be positive. Maybe somebody else wore Jimmy's shoes. However, it's more likely that Jimmy wore the shoes.

2. Find part E.
   - (Teacher reference:)

   - You're going to write about inferences that are not very probable.
   - You can see two pictures with a missing middle picture.
   - Blinky wrote about what happened in the missing middle picture. I'll read his account:

   Two giants rode their horses into Lisa's campsite. One of them pulled down the clothesline and sent Lisa's clothes flying onto the ground. The other giant grabbed the rope and rode up under the tree. He reached up and tied one end of the rope to the tree. Then both giants rode away. One of them called back to Lisa, "Have a good day."
4. Argument 3: It rained on Tuesday. Tuesday was the fourth day in March. Therefore, it rained on all the days in March.
   • Tell me about the conclusion. (Signal.) More general.
   • That argument is upside-down. Here's what you should have for the right-side-up argument:
     It rained on all the days in March.
     Tuesday was the fourth day in March.
     Therefore, it rained on Tuesday.
   • Raise your hand if you got it right.

5. Argument 4: Every tide pool is full of living things. There are tide pools in Bay City. Therefore, all the tide pools in Bay City are full of living things.
   • Tell me about the conclusion. (Signal.) More specific.
   • You didn't have to rewrite that argument, because it's not faulty.
   • Raise your hand if you got it right.

EXERCISE 6
INDEPENDENT WORK

1. Do the independent work for lesson 62.
2. (Before beginning the next lesson, check the students' independent work.)

   Key for independent work:

   Part G
   1. The men who were working on top of the tower were cold.
   2. We went to the park that was near our house.
   3. They looked at the mountains that were 50 miles away.
   4. The girls who won the contest were proud.

   Part H
   (Accept paragraphs that describe the conclusion of the argument and indicate that the evidence does not rule out all possibilities. Two forms have been learned that students might base their response on. These forms tell what does or doesn't show and name other possibilities.)

   [The argument concludes that a lot of crickets were making the noise last night. However, the evidence does not indicate that crickets are the only things that make noise at night. Possibly, coyotes or people partying might have made the noise.]

   Or:

   [The argument indicates that a lot of crickets were making the noise last night; however, the evidence is inadequate. The specific evidence indicates only that there was a lot of noise. Possibly, dogs or sirens were making the noise.]

   Part I
   Only one plan is practical. [Marrying] is not practical because [Hilda may not find a millionaire who wants to marry her]. Also, [marrying should be for love, not for getting something]. [Waiting for a gift] is not practical because [Hilda may have to wait a very long time]. Also, [waiting is not a reliable way to get a car].

   The most practical plan is for Hilda to [get a job]. The plan has these advantages: it [is a plan that Hilda has control over]; it [makes Hilda responsible for herself].