Story Title: *Hidden Worlds (Basal Words)*  
Unit: 6  
Pages: 740 – 751

Word Families and Definitions for Steps 1 - 2 - 3

**STEP 1- Key Words**  
(These definitions are written on the board or chart paper and pre-taught at the start of Step 1.)

- **research** - careful study to find and learn facts about a subject  
  (Pg 745)  
- **specimens** - items or parts typical of a group  
  (Pg 746)  
- **scoured** - cleared, dug, or removed by or as if by a powerful current of water  
  (Pg 747)

**STEP 2- Target Words**  
(These definitions are written on the board or chart paper and pre-taught at the start of Step 2.)

For **research**:
- **study** - the pursuit of knowledge as by observation or research  
- **inquiry** - a specific study, investigation, or research

For **specimens**:
- **samples** - portions or pieces of something that are representative of the whole  
- **examples** - models or samples of what others are like

For **scoured**:
- **eroded** - eaten into, worn away, or destroyed by having been worn away  
- **demolished** - forcefully torn down or taken apart

**STEP 3- Target Words**  
(These words are written on the board, but their definitions are NOT TAUGHT in Step 3.)

For **research**:
- **investigation** - an inquiry into a matter; a thorough exploration or inspection; and examination  
- **discovery** - something obtained through knowledge or study

For **specimens**:
- **collections** - groups of objects brought together for study or show  
- **models** - versions of something that can be shared, copied, or studied

For **scoured**:
- **gouged** - scooped out as if with a chisel (a gouge)  
- **corroded** - eaten or worn away gradually as if by gnawing, especially by chemical action

Teacher Questions for Steps 1 - 2 - 3

**STEP 1 - Questions**  
(When the sentence in story with the key word is reached, stop and ask the following questions.)

(Pg 745) **SENTENCE with Key Word:**
In graduate school Denise began to use the science department's electron microscopes for his own **research**, studying tiny living things called cyanobacteria.

**Questions:**
1. What does the word **research** mean in this sentence?
2. How does the word **research** contribute toward the overall meaning of this story so far?

*Definition for Questions 1 - 2:*

**research** - careful study to find and learn facts about a subject
SENTENCE with Key Word:
When he returns to the lab, the boxes and bottles are usually full of interesting specimens: algae, lichens, mushrooms, seeds, leaves, insects, bark, soil, and flowers.

Questions:
1. What does the word specimens mean in this sentence?
2. How does the word specimens contribute toward the overall meaning of this story so far?

Definition for Questions 1 - 2:
specimens - items or parts typical of a group

SENTENCE with Key Word:
Floods of boiling mud and water from melting snow scoured riverbeds.

Questions:
1. What does the word scoured mean in this sentence?
2. How does the word scoured contribute toward the overall meaning of this story so far?

Definition for Questions 1 - 2:
scoured - cleared, dug, or removed by or as if by a powerful current of water

STEP 2 - Questions (Students are directed to three-sentence block containing each Key Word. Students then read the three-sentence block and substitute Target Words.)

THREE-SENTENCE BLOCK With Key Word: research:
"It was thrilling to go underwater to observe and collect the plants and animals I wanted to study."

In graduate school Denise began to use the science department's electron microscopes for his own research, studying tiny living things called cyanobacteria.

Denise also used the microscopes to help other scientists.

FIRST TARGET WORD SUBSTITUTED and Questions: (Read by students with substitution)

"It was thrilling to go underwater to observe and collect the plants and animals I wanted to study."

In graduate school Denise began to use the science department's electron microscopes for his own study, studying tiny living things called cyanobacteria.

Denise also used the microscopes to help other scientists.

Questions:
1. What does the word study mean in this sentence?
2. If the author had chosen study, how would the word study contribute toward the overall meaning of this story?
3. Explain whether using the word study instead of research changes the meaning of the sentence or story.

Definitions for Questions 1 - 2 - 3:
research - careful study to find and learn facts about a subject
study - the pursuit of knowledge as by observation or research

SECOND TARGET WORD SUBSTITUTED and Questions: (Read by students with substitution)

"It was thrilling to go underwater to observe and collect the plants and animals I wanted to study."

In graduate school Denise began to use the science department's electron microscopes for his own inquiry, studying tiny living things called cyanobacteria.

Denise also used the microscopes to help other scientists.

Questions:
1. What does the word inquiry mean in this sentence?
2. If the author had chosen inquiry, how would the word inquiry contribute toward the overall meaning of this story?
3. Explain whether using the word inquiry instead of study changes the meaning of the sentence or story.

Definitions for Questions 1 - 2 - 3:

- study - the pursuit of knowledge as by observation or research
- inquiry - a specific study, investigation, or research

(Pg 746) **THREE-SENTENCE BLOCK With Key Word: specimens** (For reference- NOT to be re-read)

Whenever Dennis goes on field trips, he takes along collecting boxes and bottle. When he returns to the lab, the boxes and bottles are usually full of interesting specimens: algae, lichens, mushrooms, seeds, leaves, insects, bark, soil, and flowers. Dennis has explored hidden worlds in places ranging from the blast zone of a volcano to the dust balls underneath people's beds!

**FIRST TARGET WORD SUBSTITUTED and Questions:** (Read by students with substitution)

Whenever Dennis goes on field trips, he takes along collecting boxes and bottle. When he returns to the lab, the boxes and bottles are usually full of interesting samples: algae, lichens, mushrooms, seeds, leaves, insects, bark, soil, and flowers. Dennis has explored hidden worlds in places ranging from the blast zone of a volcano to the dust balls underneath people's beds!

**Questions:**
1. What does the word samples mean in this sentence?
2. If the author had chosen samples, how would the word samples contribute toward the overall meaning of this story?
3. Explain whether using the word samples instead of specimens changes the meaning of the sentence or story.

Definitions for Questions 1 - 2 - 3:

- specimens - items or parts typical of a group
- samples - portions or pieces of something that are representative of the whole

**SECOND TARGET WORD SUBSTITUTED and Questions:** (Read by students with substitution)

Whenever Dennis goes on field trips, he takes along collecting boxes and bottle. When he returns to the lab, the boxes and bottles are usually full of interesting examples: algae, lichens, mushrooms, seeds, leaves, insects, bark, soil, and flowers. Dennis has explored hidden worlds in places ranging from the blast zone of a volcano to the dust balls underneath people's beds!

**Questions:**
1. What does the word examples mean in this sentence?
2. If the author had chosen examples, how would the word examples contribute toward the overall meaning of this story?
3. Explain whether using the word examples instead of samples changes the meaning of the sentence or story.

Definitions for Questions 1 - 2 - 3:

- samples - portions or pieces of something that are representative of the whole
- examples - models or samples of what others are like

(Pg 747) **THREE-SENTENCE BLOCK With Key Word: scoured** (For reference- NOT to be re-read)

The blast from the eruption flattened huge forests of trees. Floods of boiling mud and water from melting snow scoured riverbeds. The countryside was covered with a thick ash for miles around.
FIRST TARGET WORD SUBSTITUTED and Questions: (Read by students with substitution)

The blast from the eruption flattened huge forests of trees. Floods of boiling mud and water from melting snow eroded riverbeds. The countryside was covered with a thick ash for miles around.

Questions:
1. What does the word eroded mean in this sentence?
2. If the author had chosen eroded, how would the word eroded contribute toward the overall meaning of this story?
3. Explain whether using the word eroded instead of scoured changes the meaning of the sentence or story.

Definitions for Questions 1 - 2 - 3:

scoured - cleared, dug, or removed by or as if by a powerful current of water
eroded - eaten into, worn away, or destroyed by having been worn away

SECOND TARGET WORD SUBSTITUTED and Questions: (Read by students with substitution)

The blast from the eruption flattened huge forests of trees. Floods of boiling mud and water from melting snow demolished riverbeds. The countryside was covered with a thick ash for miles around.

Questions:
1. What does the word demolished mean in this sentence?
2. If the author had chosen demolished, how does the word demolished contribute toward the overall meaning of this story?
3. Explain whether using the word demolished instead of eroded changes the meaning of the sentence or story.

Definitions for Questions 1 - 2 - 3:

eroded - eaten into, worn away, or destroyed by having been worn away
demolished - forcefully torn down or taken apart

STEP 3 - Questions (Students are directed to the three-sentence block containing each Key Word. Students then read the three-sentence block and substitute Target Words. REMINDER- DEFINITIONS FOR THESE WORDS ARE NOT TAUGHT.)

(Pg 745) THREE-SENTENCE BLOCK With Key Word: research (For reference - NOT to be re-read)

"It was thrilling to go underwater to observe and collect the plants and animals I wanted to study."

In graduate school Denise began to use the science department's electron microscopes for his own research, studying tiny living things called cyanobacteria. Denise also used the microscopes to help other scientists.

FIRST TARGET WORD SUBSTITUTED and Questions: (Read by students with substitution)

"It was thrilling to go underwater to observe and collect the plants and animals I wanted to study."

In graduate school Denise began to use the science department's electron microscopes for his own investigation, studying tiny living things called cyanobacteria. Denise also used the microscopes to help other scientists.

Questions:
1. What does the word investigation mean in this sentence?
2. If the author had chosen investigation, how would the word investigation contribute toward the overall meaning of this story?
3. Explain whether using the word investigation instead of inquiry changes the meaning of the sentence or story.
**Definitions for Questions 1 - 2 - 3:** (For teacher reference only)

- inquiry - a specific study, investigation, or research
- investigation - an inquiry into a matter; a thorough exploration or inspection; and examination

**SECOND TARGET WORD SUBSTITUTED and Questions:** (Read by students with substitution)

"It was thrilling to go underwater to observe and collect the plants and animals I wanted to study."

In graduate school Denise began to use the science department's electron microscopes for her own **discovery**, studying tiny living things called cyanobacteria. Denise also used the microscopes to help other scientists.

**Questions:**
1. What does the word **discovery** mean in this sentence?
2. If the author had chosen **discovery**, how would the word **discovery** contribute toward the overall meaning of this story?
3. Explain whether using the word **discovery** instead of **investigation** changes the meaning of the sentence or story.

**Definitions for Questions 1 - 2 - 3:** (For teacher reference only)

- investigation - an inquiry into a matter; a thorough exploration or inspection; and examination
- discovery - something obtained through knowledge or study

(Pg 746) **THREE-SENTENCE BLOCK With Key Word: common-sense** (For reference- NOT to be re-read)

Whenever Dennis goes on field trips, he takes along collecting boxes and bottle. When he returns to the lab, the boxes and bottles are usually full of interesting **specimens**: algae, lichens, mushrooms, seeds, leaves, insects, bark, soil, and flowers. Dennis has explored hidden worlds in places ranging from the blast zone of a volcano to the dust balls underneath people's beds!

**FIRST TARGET WORD SUBSTITUTED and Questions:** (Read by students with substitution)

Whenever Dennis goes on field trips, he takes along collecting boxes and bottle. When he returns to the lab, the boxes and bottles are usually full of interesting **collections**: algae, lichens, mushrooms, seeds, leaves, insects, bark, soil, and flowers. Dennis has explored hidden worlds in places ranging from the blast zone of a volcano to the dust balls underneath people's beds!

**Questions:**
1. What does the word **collections** mean in this sentence?
2. If the author had chosen **collections**, how would the word **collections** contribute toward the overall meaning of this story?
3. Explain whether using the word **collections** instead of **examples** changes the meaning of the sentence or story.

**Definitions for Questions 1 - 2 - 3:** (For teacher reference only)

- examples - models or samples of what others are like
- collections - groups of objects brought together for study or show

**SECOND TARGET WORD SUBSTITUTED and Questions:** (Read by students with substitution)

Whenever Dennis goes on field trips, he takes along collecting boxes and bottle. When he returns to the lab, the boxes and bottles are usually full of interesting **models**: algae, lichens, mushrooms, seeds, leaves, insects, bark, soil, and flowers. Dennis has explored hidden worlds in places ranging from the blast zone of a volcano to the dust balls underneath people's beds!
Questions:
1. What does the word **models** mean in this sentence?
2. If the author had chosen **models**, how would the word **models** contribute toward the overall meaning of this story?
3. Explain whether using the word **models** instead of **collections** changes the meaning of the sentence or story.

**Definitions for Questions 1 - 2 - 3:** (For teacher reference only)
- **collections** - groups of objects brought together for study or show
- **models** - versions of something that can be shared, copied, or studied

(Pg 747) **THREE-SENTENCE BLOCK With Key Word: scoured** (For reference - NOT to be re-read)

The blast from the eruption flattened huge forests of trees. 
*Floods of boiling mud and water from melting snow* **scoured** riverbeds. 
The countryside was covered with a thick ash for miles around.

**FIRST TARGET WORD SUBSTITUTED and Questions:** (Read by students with substitution)

The blast from the eruption flattened huge forests of trees. 
*Floods of boiling mud and water from melting snow* **gouged** riverbeds. 
The countryside was covered with a thick ash for miles around.

Questions:
1. What does the word **gouged** mean in this sentence?
2. If the author had chosen **gouged**, how would the word **gouged** contribute toward the overall meaning of this story?
3. Explain whether using the word **gouged** instead of **demolished** changes the meaning of the sentence or story.

**Definitions for Questions 1 - 2 - 3:** (For teacher reference only)
- **demolished** - forcefully torn down or taken apart
- **gouged** - scooped out as if with a chisel (a gouge)

**SECOND TARGET WORD SUBSTITUTED and Questions:** (Read by students with substitution)

The blast from the eruption flattened huge forests of trees. 
*Floods of boiling mud and water from melting snow* **corroded** riverbeds. 
The countryside was covered with a thick ash for miles around.

Questions:
1. What does the word **corroded** mean in this sentence?
2. If the author had chosen **corroded**, how would the word **corroded** contribute toward the overall meaning of this story?
3. Explain whether using the word **corroded** instead of **gouged** changes the meaning of the sentence or story.

**Definitions for Questions 1 - 2 - 3:** (For teacher reference only)
- **gouged** - scooped out as if with a chisel (a gouge)
- **corroded** - eaten or worn away gradually as if by gnawing, especially by chemical action

**Step 4: Expansion Task Using Key and Target Words** (All Key and Target Words are written on board, but in a “random” arrangement (i.e., words are NOT grouped by meaning))

**Variation 1:** Students are asked to select a word on the board and then use the word in a sentence that involves something they have either done or experienced. Students present their sentence orally to the class.

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Variation 2: The teacher points to different words on the board and has one or more students use the word in a sentence that involves something they have done or experienced. Students present their sentence orally to the class.

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General Implementation Notes
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1. Before starting a lesson, mark the key words (and three-sentence blocks) in the teacher edition using Post-It™ notes. (Optional: Have students use Post-It™ notes to mark these pages in their textbooks as well.)

2. To help focus your instruction and pacing, feel free to mark or highlight any portions of this teacher guide as needed before starting the lesson.

3. Write the three key words and definitions on the board or chart paper before starting the lesson.

4. Step 1 should occur the first time the story is read aloud by students. Write the key words and definitions on the board or chart paper before starting Step 1. Suggestion: Have different students read the story on a paragraph-by-paragraph basis. Interrupt the reading process when the sentence with the key word is read. Then ask the two questions for each key word before continuing. Continue reading until the entire story has been read. (Other approaches to Shared Reading may be employed to accomplish this same purpose.)

5. For Step 2, after the entire story has been read, add the target words and definitions on the chart paper or board next to the key words previously taught. After students read a three-sentence block and substitute a target word, ask the three scripted questions. Note: For the third question in Step 2, the substituted word is always compared to the preceding target word that was used.

6. For Step 3, erase all the words on the board--or cover the chart paper--and write each pair of new target words on the board or chart paper; however…

   DO NOT WRITE OR TEACH DEFINITIONS IN STEP 3. Follow the script for Step 3.

7. Correcting student errors: In Steps 1 and 2 refer students to the definitions and re-ask the question(s). For Step 3, refer students only to the sentence or story context. Do NOT provide students with definitions.

8. For cumulative review: Place sample words from the semantic family on the board, and have students use the words in a sentence, following either Variation 1 or 2.

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Teacher Notes
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