Handouts

UNIT 7, MODULE 3:
Generating Questions to Monitor Comprehension, Level 3

TEKS Connections

English Language Arts and Reading

Reading/Comprehension Skills (Figure 19).

Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to:

Grade 6

(B) ask literal, interpretive, evaluative, and universal questions of text;

(C) monitor and adjust comprehension (e.g., using background knowledge; creating sensory images; rereading a portion aloud; generating questions)

(D) make inferences about text and use textual evidence to support understanding.

Grades 7–8

(B) ask literal, interpretive, evaluative, and universal questions of text;

(C) monitor and adjust comprehension (e.g., summarizing and synthesizing; making textual, personal, and world connections; creating sensory images);

(D) make complex inferences about text and use textual evidence to support understanding.

Reading Elective Credit (Grades 6–8)

(4) The student comprehends selections using a variety of strategies. The student is expected to:

(C) self-monitor reading and adjust when confusion occurs by rereading, using resources, and questioning;

(E) make inferences such as drawing conclusions and making generalizations or predictions, supporting them with prior experiences and textual evidence;

(K) use questioning to enhance comprehension before, during, and after reading.

SOURCE: Texas Education Agency (TEA), 2008a.

English Language Proficiency Standards (ELPS) Connections

4 (G) The student is expected to demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs.

4 (J) The student is expected to demonstrate English comprehension and expand reading skills by employing inferential skills such as predicting, making connections between ideas, drawing inferences and conclusions from the text and graphic sources, and finding supporting text evidence commensurate with content area needs.

Students will respond to questions and make connections as they learn the routine and eventually will make these independent thinking processes.

SOURCE: TEA, 2007.

College and Career Readiness Standards (CCRS) Connections

English/Language Arts

II. Reading

(A)(4) Draw and support complex inferences from text to summarize, draw conclusions, and distinguish fact from simple assertions and opinions.

Cross-Disciplinary Standards

I. Key Cognitive Skills

(D)(1) Self-monitor learning needs and seek assistance when needed.

II. Foundational Skills

(A) (5) Analyze textual information critically.

Questioning routines, when applied independently, help students monitor their comprehension and allow them to identify when they need to seek assistance to better understand what they are reading.

SOURCE: TEA, 2008b.

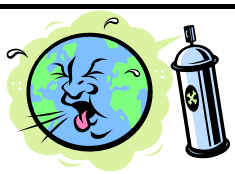
Generating "Making Connections" Questions

1. Use the vocabulary instructional routine to introduce important vocabulary words:
    - Select academic and content-specific words.
    - Pronounce the words.
    - Provide student-friendly definitions.
2. Briefly state the primary focus of the chapter or section and explain how it connects to students' prior learning.
3. Explain the purpose of generating questions:
    - Help you understand what you read
    - Help you remember important information about what you read
4. Introduce the Level 3 "making connections" question type:
    - Questions that cannot be answered by using text alone
    - Questions that require you to think about what you just read, what you already know, and how it fits together
5. Have students work with partners to create "making connections" questions:
    - Read the passage together and discuss what it is about.
    - Relate something in the passage to something previously read, studied, or experienced.
    - Use the stems to make a question.
        - How is _____ like (similar to) _____?
        - How is _____ different from _____?
        - How is _____ related to _____?
    - Combine information in the passage with what is already known to answer the question.

Poisons on our Planet

Student Fact Sheet D-1

Poisons on our Planet



A Healthy World

From the Sahara Desert in Africa to the coral reefs of the South Pacific, every living thing on Earth needs clean air, clean water, and clean land in order to survive. Whether it's the air we breathe, the water we drink, or the food we eat, planet Earth gives us everything we need to live healthy lives.

Natural Toxins

Although nature provides us with everything we need to be healthy, there are many things in nature that aren't healthy for us and can actually be poisonous or **toxic**. These poisons are called **toxins**. Toxins can be found in a variety of things like the venom from a rattlesnake, the leaves of an oleander bush, and the poison from a deadly mushroom. The toxins found in nature are there to protect the plant or animal from being eaten by another animal or to kill an animal or insect for food. For example, a spider will use poison to paralyze a fly so that it can eat it.

Nature's Warning Signs

When something in nature is poisonous, it usually has some sort of warning sign. For instance, poison arrow frogs from the rainforests are brightly colored. This lets other animals know how poisonous they are. These small frogs are so deadly that one drop of their poison can kill a human being! There are over 170 different kinds of poison arrow frogs and each one has a bright splash of color like red, yellow green or blue.

Using Nature's Toxins

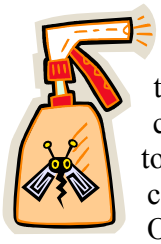
Throughout history, human beings have learned to use natural toxins for help. For instance, the native or **indigenous** peoples that have lived in the rainforest for thousands of years discovered how to use poison from the poison arrow frog. They learned how to safely take out or **extract** this poison and put it on their arrows in order to hunt. That's how the poison arrow frog got its name!

Doctors around the world have also used **curare**, a poison from a rainforest vine in South America, to **anesthetize** or safely put patients to sleep during operations. Although natural toxins can be deadly, there are many cases where they can be helpful.

Man-made Toxins

Today, most of the poisons on our planet don't come from nature. They are made from humans. Whether it's the chemicals we make and use to create things like plastic, batteries, and computers, or other products like gasoline and **pesticides** or poisons used to kill pests, human beings have created a lot of toxic things or **substances**. When these poisonous substances are burned, dumped in the water, or spilled on the earth, they create serious pollution that poisons our air, water, and land. If animals or human beings inhale this polluted air, drink the polluted water or live on polluted land, it can make us sick. Most man-made toxins are damaging to our environment and our health.

Toxins at Home



There are many common household products that are toxic. These products can be cleaners like chlorine bleach, toilet bowl cleaners, oven cleaner, and furniture polish. Other household products that are toxic include mercury thermometers, motor oil, pesticides, and paint thinner. The most toxic products in the United States have a label on their package that says either: **caution, warning, danger or poison**. These labels warn people that the product is toxic. Never touch any product that has one of these words listed on it—especially the words "danger" or "poison". Only adults should handle these products!

The Effect of Toxins

Using man-made toxins has many different effects or **consequences** on our health and environment. One such toxin, **chlorine,** is a common chemical used in many different ways. It is used to **bleach** or whiten things like paper and clothes; it is poured into water supplies to **disinfect** or kill germs, and it is used to make or **manufacture** plastics, pesticides and many other materials around the world.

Although household chlorine products like **chlorine bleach** are useful in killing germs and bleaching things white, it can be dangerous if we inhale the fumes or mix it with other household chemicals. Fortunately there are other types of bleaches that do not contain chlorine. These **chlorine-free** bleaches are much safer for us to use.

The biggest problem with chlorine is that it can harm nature. Whenever substances with chlorine are burned they create a different substance we don't want called **by-products**. One type of by-product is called **dioxins**. Dioxins are some of the most poisonous substances on our planet. Some dioxins are created in nature, like when volcanoes erupt, but most of the dioxins on the planet are man-made from manufacturing with chlorine or burning substances with chlorine. When dioxins are put into the air or water, they get absorbed in the bodies or **fatty tissue** of fish and animals as well as humans. Scientists say that even small amounts of dioxins can cause cancer, birth defects and other illnesses in people and animals.

Let's Have A Healthy Planet!

Even though toxic chemicals are still being used around the world, there are many things we can do to use safer, less-toxic products that don't poison our planet, the animals, or our bodies. Ask your parents to use chlorine-free bleach at home and to use less-toxic cleaning sprays and other household products. Many of these items can be purchased at stores or on the Internet.

You can also teach your parents not to dump poisons down the drain like used motor oil, paint-thinner or pesticides. Have them take these dangerous or **hazardous** materials to the **Hazardous Waste Facility**.

Better yet, when it comes to using pesticides, ask your parents to find safer ways to control pests in the home and garden. This safer pest control is called **Integrated Pest Management** (IPM) and can control pests without poison.

We all have the power to make our planet a safe place for every living thing. By using fewer toxic chemicals and learning about safer, non-toxic products, we can rid our planet of perilous poisons!

SOURCE: San Francisco Department of the Environment, n.d.
Reprinted with permission from http://www.sfenvironment.com/aboutus/school/teacher/fact_sheets.htm

"Making Connections" Question Cards

Level 3—Making Connections

- ❑ Questions cannot be answered by using text alone
- ❑ Answers require you to think about what you just read, what you already know, and how it fits together

➢ How is _____ like (similar to) _____ ?
➢ How is _____ different from _____ ?
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QUESTIONING STRATEGIES adapted from Vaughn, S., Emonds, M., Simmons, D., & Rupley, W.H. (n.d.). *Enhancing the quality of expository text instruction and comprehension through content and case-situated professional development* (Teacher Quality Research Project; R305M050121A). Washington, D.C.: U.S Department of Education, Institute of Educational Sciences.

Level 3—Examples

- ☐ How is this folktale similar to folktales in Africa and other cultures?
- ☐ Why is the Alamo important in Texas history?
- ☐ What would happen if the Earth did not tilt on an axis?

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Scaffolding Level 3 Questions

- Break the text into smaller sections at first, but gradually increase the length.
- Provide a suggested number of questions to generate for each section.
- Indicate what types of prior knowledge would be helpful in making a connection to the passage.
- Regularly share students' questions and provide positive or corrective feedback.
- Return to modeling the routine with the whole class, pairs, small groups, or individual students, as needed.
- Remind students to use their question card and to make questions with stems, such as:
    - How is _____ like/similar to _____?
    - How is _____ different from _____?
    - How is _____ related to _____?
- Make sure students are combining information from the passage with other information they already know, have learned, or have read in another text.

Student Log for Self-generated Questions

LEVEL ____	**QUESTION 1:**		
	Answer:	**Provide the evidence! How do you know that?**	**Page Number(s)**
LEVEL ____	**QUESTION 2:**		
	Answer:	**Provide the evidence! How do you know that?**	**Page Number(s)**
LEVEL ____	**QUESTION 3:**		
	Answer:	**Provide the evidence! How do you know that?**	**Page Number(s)**

Reflection Log

Think about how you might use the information presented in this module to plan instruction and support students' academic literacy needs. What seemed particularly useful to you? What ideas were new or interesting? What confirmed or challenged your previous beliefs? What questions do you still have?

Use the lines below to record your thoughts.

References

Unit 7: Inferential Comprehension Instructional Routines
Module 3: Generating Questions to Monitor Comprehension, Level 3

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