5TH GRADE

Science WEEKLY CHECKLIST

suggested schedule

Nov. 17- Nov 23, 2025

Monday

- Finish any assigned IXLs
- Science Fair: Finish Powerpoint (Google Slides) if needed

Tuesday

- Read Chapter 7 attached to HW packet starting on next page
- Highlight any important info

Wednesday

- Complete pages 5-7

Thursday

- Review for quiz

NO HOMEWORK FRIDAY!!
ENJOY YOUR WEEKEND :)

Reminders

- Powerpoint due 11/17
- Moon Journal was Due 11/4
  - Can't see the moon? Use this website:
    - Moon Phase Tonight for Miami, Florida
- Life Science Test (tentative, 12/19) depends on the class schedule. Different sections may have different test days depending on class pace.
- EXTRA CREDIT: tbd

Life Science Unit Vocab (pending)

Page 1

Plant Responses

Chapter 7

If you grow a plant by a window, it may lean toward the light. This is one example of how plants respond to a stimulus. The stimulus is sunlight, and the response is that the plant bends.

Like animals, plants can sense what is happening in their environment. However, plants do not have the same structures as animals. Plants do have responses that help them get energy and water and nutrients. We call these responses **tropisms**. The word comes from ancient Greek and means a turning.

A well-known plant tropism is the response to light. How do plants move so that they can face toward light? Cell enlargement on one side of a stem causes the plant to lean. As the plant leans toward light, its leaves can absorb more of the light.

Big Question

How do plants sense and respond to their environments?

Vocabulary

tropism, n. a plant's growth or movement in response to a stimulus

Plants will often grow toward the sunlight to better meet their energy needs.

Page 2

Plants Respond to Gravity

Plants also respond to gravity. A plant's parts respond to Earth's gravity. Some parts grow down, toward the pull of gravity. Others grow up, or away from the pull. The growth of a plant part away from or toward the pull of gravity is another kind of tropism.

Suppose you were to plant a seed sideways. In which direction do you think the roots and shoots would grow? If you think straight out, you are right—at first! But soon the root would start to grow downward. The shoot would turn upward. Structures in each plant cell signal them to grow in these directions.

A plant's responses to light and gravity are tropisms that help it to meet its needs. A plant's roots grow down, away from light and toward the pull of gravity. The roots grow this way so that the plant can reach the water and nutrients it needs.

How are the shoot and roots from this seed responding to light and gravity?

Page 3

Plants Respond to Temperature

In fall, leaves change color. This change is the trees' response to shorter days and lower temperatures. In fall, the weather becomes cooler, and there is less daylight. Leaves do not make as much food. The chemical that gives leaves their green color begins to break down. Other chemicals produce red, yellow, and orange colors in the leaves. Later in fall, trees drop their leaves. They store the energy. The trees also save water.

Plants also respond to high temperatures. A plant's stem, leaves, and flowers may droop or wilt. Wilting happens when a plant loses more water (in the form of water vapor) than its roots take in. In hot, dry weather, the soil may have too little water to meet the plant's needs.

These are not examples of tropisms. Why? The plant is not growing or turning its direction of growth.

Changes in daylight and temperature cause a tree's leaves to change color.

Page 4

Plants Respond to Touch

The Venus flytrap is a carnivorous plant. It gets some of its nutrients from insects. How can this plant catch insects? It doesn't have eyes or ears. Instead, the Venus flytrap responds to an insect's body weight using a sense of touch.

Venus flytraps have tiny hairs that act as sensors. When a hair is touched twice in a short amount of time, the plant's leaves snap shut. The insect becomes trapped inside the leaves. Here, the plant digests the insect. Then the leaves can absorb the nutrients the plant needs.

Plants will also respond to contact with objects. For example, when a plant's roots encounter a rock in the soil, they will grow around it. Some plants, such as pea plants, grow vines or tendrils. The vines support the plants as they grow. The vines wrap around nearby objects, allowing the plant to grow taller than it could otherwise. These are both examples of tropisms.

When a plant grows toward light, the movement happens too slowly for you to see it happening. The Venus flytrap moves quickly enough that you can see it when it closes to trap an insect.

Name _____ Date _____

Activity Page 11.1

Plant Stimulus and Response

Watch the video, and answer the questions below.

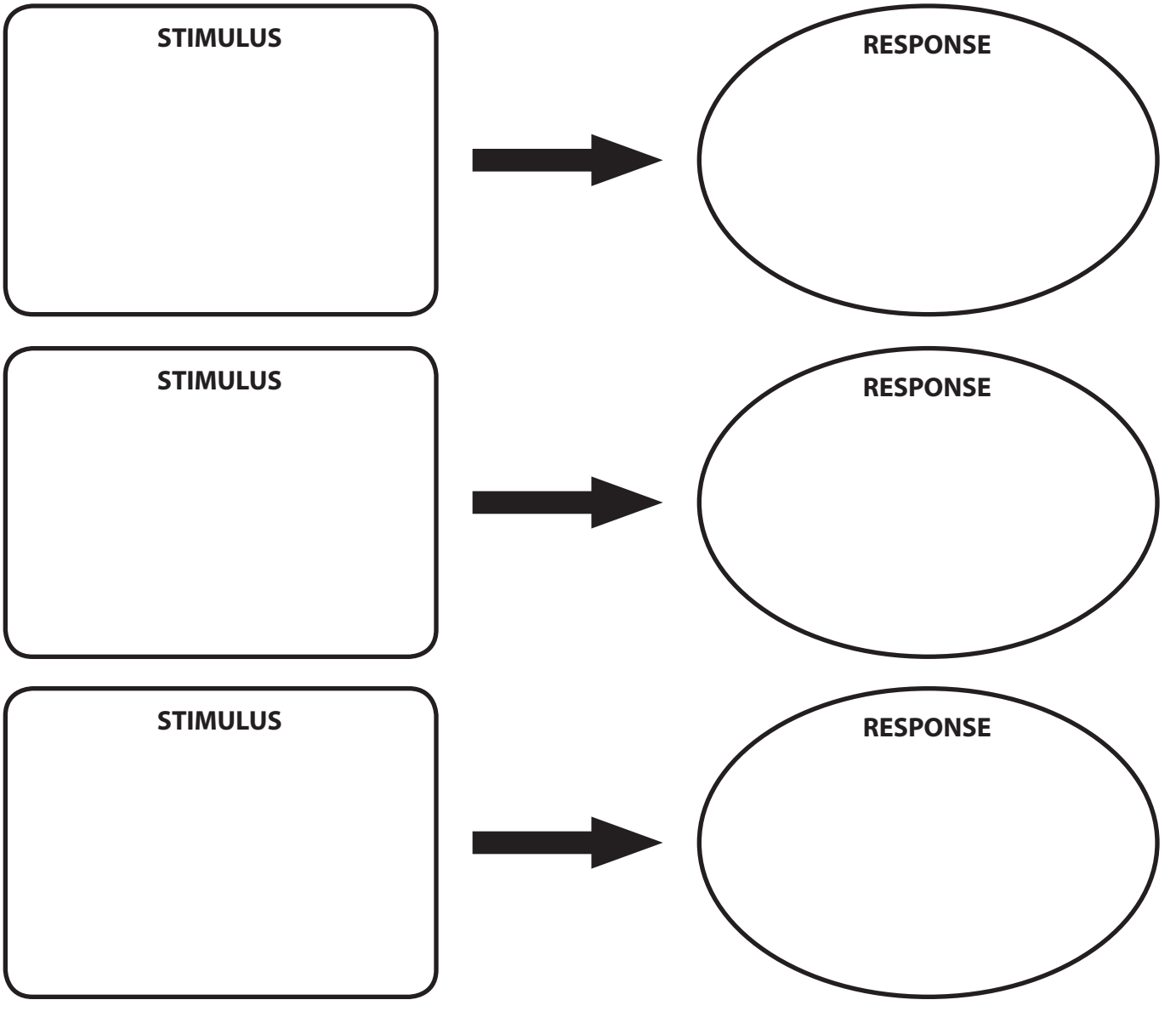
1. Name three different stimuli that affect plants.

_____

2. Name three ways that plants respond to these stimuli.

_____

Use your answers above to complete the diagram below based on plant stimuli and responses.



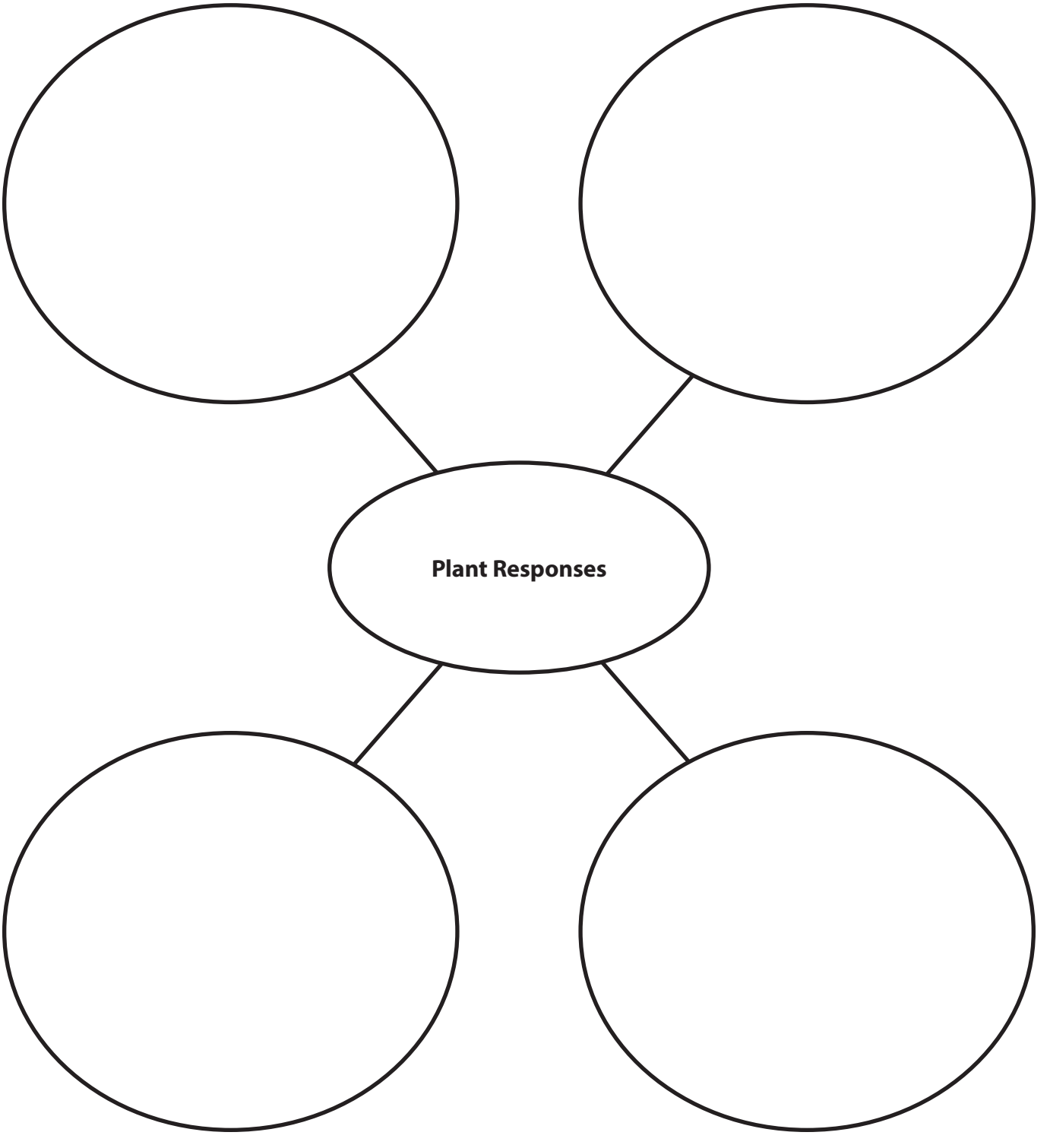
Name _____ Date _____

Activity Page 13.1

Page 6

Plant Response Concept Map

As you read Chapter 7, complete the diagram below. Use the outer circles to write about the four ways plants respond to stimuli.



Name _____ Date _____

Activity Page 6.2

Lesson 6 Check

Consider how plant structures relate to their functions. Then answer the questions that follow.

1. What structure does a plant use to absorb energy from sunlight to make food?

_____

2. What structure does a plant use to absorb water?

_____

3. Name two structures that a plant uses to reproduce.

_____

_____

4. You're a farmer breeding plants that can survive in dry conditions. Explain why you might need to study how roots grow.

_____

_____

_____

5. Describe an example of a plant responding to its environment.

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