LONGWOOD GARDENS

Weird Plants by Chris Thorogood Toolkit Activities

The Longwood Gardens Community Read is a program designed to encourage reading for pleasure and start a conversation. Focusing on literature about gardens, plants, and the natural world, we feature an exceptional book annually (paired with similarly-themed middle school and younger readers' books) through a variety of programs, discussions, and lectures across all community partner organizations. For more information about the Community Read, go to www.longwoodgardens.org/community-read.





LONGWOOD GARDENS

Meets the following Common Core standards:

CCSS.ELA-Literacy.RL.6.2

Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

CCSS.ELA-Literacy.RL.7.2

Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.

CCSS.ELA-Literacy.RL.8.1

Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

Meets the following Next Generation Science Standards:

MS-LS2-2 Ecosystems: Interactions, Energy, and Dynamics

Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.







Weird Plants by Chris Thorogood

Enclosed in this Toolkit you will find middle school-level activities designed to accompany the book *Weird Plants* by Chris Thorogood

- 1. Overview of Weird Plants
- Activities for middle school students to complete in the library or at home
- 3. Modified materials to meet the needs of English language learners and special needs learners

Activities

Create a Venus Flytrap

Memory Card Game / Modified Memory Card Game

Match Card Game / Modified Match Card Game

Charades Card Game / Modified Charades Card Game

What Plant Am I? Card Game / Modified What Plant Am I? Card Game

Get to Know the Book Activities

- Read and Summarize
- Scavenger Hunt

Design a Weird Plant

Weird Plant Battle Card Game

Extension Activities







Overview of Weird Plants by Chris Thorogood

This beautifully illustrated book looks at some unusual and little-known plants around the world. The book groups the plants into seven sections according to their characteristics.

- Vampires (p.13) These odd plants have a parasitic relationship with other plants in the area.
- Killers (p.37) Carnivorous plants like the Venus flytrap and pitcher plants have evolved to get their nutrition where they can.
- Fraudsters (p.55) Plants in this category have developed a variety of ways to trick, fool, and attract pollinators.
- Jailers (p.69) Jailers trap or temporarily imprison pollinators, in order to spread their pollen.
- Accomplices (p. 83) Mutualistic relationships have developed between these
 plants and animals. The plants provide something the animals need and the
 animals do the same for the plant. They need each other!
- Survivors (p. 97) You will find these plants in some of the most hostile environments on the planet. All of these plants have evolved to survive and thrive.
- Hitch-Hikers (p.107) Most important to a plant is the dispersal of its seeds.
 These plants have some very unusual ways of ensuring that their seeds are spread.







Create a Venus Flytrap

Materials Needed

- Weird Plants by Chris Thorogood
- 9" paper plates (standard thin paper plates)
- Green & red paint
- Paint brushes
- White and green construction paper
- Scissors
- Masking tape
- Stapler or glue
- Paper tubes (toilet paper or paper towel)
- Small black pompoms
- Small googly-eyes
- Optional: Purchase a Venus flytrap plant (or a few) for inspiration. Give them away as door prizes.

Directions

- 1. Give each student two paper plates and one of the tubes.
- 2. One plate should be painted green on the bottom side. One plate should be painted red on the top side, with a green band around the edge.



3. Paint the tube green. Allow plates & tube to dry







- 4. Read the section in *Weird Plants* about Carnivorous Plants, specifically the Venus flytrap, and observe the real plant for inspiration. Short video clips of Venus flytraps can also be found online.
- 5. Using a strip of white construction paper, draw a zig-zag from side to side, then cut out the wedge-shapes to act as the cilia on the edge of the flytrap.



6. Glue the wedges around the edge of the top of the green paper plate, so the points are facing out, over the edge of the plate.



- 7. Glue or staple the white side of the red and green paper plates together.
- 8. Fold the plates in half, so the red plate is on the inside.
- 9. Using masking tape, tape the paper tube to one side of the flytrap, to act as a stem. Paint the masking tape green if desired.
- 10. Cut out leaf shapes from the green construction paper. Glue to paper tube.
- 11. Use two black pompoms, googly-eyes, and white construction paper wings to make a small fly to glue into the flytrap.



Example of completed Venus flytrap







Memory Card Game

Materials Needed

• 2 sets of Weird Plant Cards or Modified Weird Plant Cards per group

- 1. Divide students into groups of three or four.
- 2. Have students mix their two sets of Weird Plant Cards.
- 3. Ask students to arrange the cards face-down on a flat surface.
- 4. The first student turns over two cards.
 - a. If the two cards match, that student keeps those two cards and has another turn.
 - b. If the cards don't match, replace them face-down in the same place.
- 5. Have students continue taking turns until all cards are matched.
- 6. Student with the most matches is the winner.







Match Card Game

Materials Needed

- 1 set of Weird Plant Cards or Modified Weird Plants Cards per group
- 1 set of Clue Cards or Modified Clue Cards per group

- 1. Divide students into groups of three or four.
- 2. Place Clue Cards in a stack facing downwards in the middle of the table.
- 3. Deal out the Weird Plant Cards so each player has the same amount (set aside any extra cards). Students may look at their cards.
- 4. One student at a time draws a Clue Card from the center and reads it to the group.
- 5. Student with the Weird Plant card that matches the Clue Card gets to keep both cards.
- 6. Continue until all Clue Cards have been matched to their Weird Plant Card.
- 7. Student who finds matches for all their cards first is the winner.







Charades Card Game

Materials Needed

- 1 set of Weird Plant Cards or Modified Weird Plant Cards
- Timer

- Divide the students into two teams. Have each team create a team name using the book for inspiration.
- 2. Place the Weird Plant Cards in a stack facing downward on a flat surface.
- 3. One member of the first team selects a plant card.
- 4. That person has one minute to pantomime or act out the plant characteristics while his or her team members guess which plant they are.
 - a. If they are successful, the team gets to keep the card. If not, the card is returned to the stack.
- 5. Then it is the other team's turn.
- 6. Play continues until all the cards are gone.
- 7. The team with the most cards wins.







What Plant Am I? Card Game

Materials Needed

- 1 set of Weird Plant Cards or Modified Weird Plant Cards
- Masking tape
- Weird Plants by Chris Thorogood

- 1. The leader tapes a card to the student's back so that the information side is visible.
- 2. Each student asks another student a question about his or her card that has a 'yes' or 'no' answer.
- 3. That student reviews the information on the student's back and answers the question with a 'yes' or 'no' response.
- 4. Sample question: Am I a Killer Plant?
- 5. The student cannot ask the same person two questions in a row.
- 6. Students may use the book for help.
- 7. Students should move their card to the front after they've guessed correctly.
- 8. Game ends when all students have guessed correctly.







Get to Know the Book Activities

Materials Needed

- Weird Plants by Chris Thorogood
- Read and Summarize sheet (print needed amount from template)
- Scavenger Hunt sheet (print needed amount from template)
- Pencils

Read and Summarize Directions

Have students read the introduction of each book section. This will help to familiarize them with the book and the different types of weird plants.

Scavenger Hunt Directions

Have students use the book to answer the questions on the sheet.







| Get to Know the Book: Read and Summarize | | | |
|---|--|--|--|
| Explore the book to learn about the different types of weird plants. This is what the plants in the section 'Vampires' have in common. | | | |
| | | | |
| This is what the plants in the section 'Killers have in common. | | | |
| | | | |
| This is what the plants in the section 'Fraudsters' have in common. | | | |
| | | | |
| This is what the plants in the section ' Jailers' have in common. | | | |
| | | | |
| This is what the plants in the section 'Accomplices' have in common. | | | |
| | | | |
| This is what the plants in the section 'Survivors' have in common. | | | |
| | | | |
| This is what the plants in the section 'Hitchhikers' have in common. | | | |
| | | | |







Get to Know the Book: Scavenger Hunt

Use the book Weird Plants to find the following information.

| • | There | e are | _ categories of Weird Plants. | |
|---|--------------------------------------|---------------------------|--|--|
| • | Read the Author's Preface on page 7. | | | |
| The author paints using | | | · | |
| • Find a plant that lives in the Mediterranean. Use the map on pages 10-11 'Velocities around the World'. | | | Mediterranean. Use the map on pages 10-11 'Weird | |
| | 0 | A plant that lives in the | e Mediterranean is the | |
| | 0 | It is a plant in the | section and located on page | |
| • | My favorite Weird Plant is the | | | |
| | It is a | plant in the | section and located on page | |
| | Here is what makesintr | | | |
| | 0 | | | |
| | 0 | | | |
| | 0 | | | |







Design a Weird Plant

Materials Needed

- Paper
- Pencils
- Computer

Directions

- 1. Have students select one of the categories of weird plants.
- 2. Ask students to create their own weird plant.

Students should decide which characteristics their plant will have such as height, size, type of pollinators it attracts, habitat, and other unique features. They should include location and a common and scientific name for their plant.

3. Ask students to write a description of the plant using precise language (adjectives, similes, etc.)

Optional: Create the Plant Directions

Have students create a drawing or a three-dimensional model of their plant to represent their descriptive writing piece. This project could be completed at home using recycled materials or other arts & crafts materials.

Students present their weird plant creations in a gallery walk, or as a presentation in which they describe the plant.







Weird Plant Battle Card Game

Materials Needed

• 1 set of Weird Plant Battle Cards per group

The plants in *Weird Plants* have some very distinctive characteristics. These cards list a rating for 5 different characteristics:

- Size
- Gross Factor (smell; use e.g. animal toilet)
- Beauty
- Killer Instinct
- Rarity
- Pollination Method

- 1. Divide students into groups of 4 (if possible).
- 2. Shuffle and deal all the cards face down.
- 3. Each player holds their cards so they can only see the top one, without showing the other players.
- 4. The first player puts their top card on the table and chooses a statistic to read (e.g. Gross Factor 10). The other players then put their top cards on the table, reading their statistic for that item.
- 5. The highest value wins, and that player adds all the cards from the table to the bottom of their pile.
- 6. The winning player then picks a category from their next card and play starts again.
- 7. If two or more cards share the highest value, all the cards in that round are thrown in the middle and the round is started again. The player that wins the next round gets all the cards in the middle too.
- 8. Keep playing until one person has all the cards they are the winner.







Extension Activities for Weird Plants

- Show the different sizes of weird plants from the book using the dimensions listed (height, etc.) by drawing the height on a white board using a measuring tape, or using a ribbon, etc.
- Select one of the weird plants. Use the book to locate its native environment.
 Research other plants that grow in that area.
- Create a "wanted" poster for a weird plant including the growing conditions, uses, interesting facts, etc.
- Create an advertisement poster for a selected plant. The _____ is the WEIRDEST plant because...Have students vote on their favorites.
- Research the origin of a weird plant's common name.
- Research uses (if any) of a weird plant (medicinal, food, etc.).
- Pictionary. In a small group, one member selects one of the weird plants and draws it while the other members guess the plant's name.
- Create a Venn diagram comparing and contrasting two weird plants.
- Visit a public garden that has one or more of the weird plants on display.



