

# Teacher Guide for ODYSSEY

ZOOM! TECH-TRAVEL

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Small groups: read, discuss, create a visual, display in a walking gallery to talk about and explain the short articles.

HOT PINK! P. 2-3

Holy Hot Pink Caterpillars...(p.2-3) Research the new species that have been discovered in the Greater Mekong region in Southeast Asia. Create a poster showing a map of where it lives, its habitats, how it protects itself, a picture and what it eats. Display in gallery.

NEW SPECIES OF THE GREATER MEKONG REGION	MAP
PICTURE	PROTECTION
HABITAT	DIET

HOT PINK SUBMARINES (P.3)

Read article, research other non-manned submarines and what they are used for. What other uses could there be for non-manned subs? Create a drawing of a submarine and tell what it would be used for. Create a visual to display what you learned for the gallery.

HALF BIKE, HALF LAUNDRAMAT (p.4)

Read the article and discuss what else a bike could be used to help solve a problem that people in 3<sup>rd</sup> world countries might have. Draw the new invention and write an explanation of its use. Display in gallery. Also, do the Think about It with the invention on page 4.

BLAME THE OCTOPUS (p.5)

Read and discuss the article. Create a poster on octopi using a map, where they can be found, habitat, food, and picture. (Can be similar to the one for the Hot Pink Caterpillar.) Add to gallery.

MYSTERY OF BLOOD FALLS (p. 5)

Read and discuss the article. Do some more research on Blood Falls on the Internet. Create a poster explaining the Blood Falls using information from the article and information found from the Internet. Add to the gallery.

Have students pick an "expert" to stand at each visual to explain their findings and posters to the other students as they have the walking gallery.

Continue in small groups or as a whole group

CONSTELLATION: THE NEXT GIANT LEAP INTO SPACE (p.6-11)

Read and discuss.

1. Create a flow chart of the next generation space transportation system.
2. Why build the new space transportation with old features?
3. Why not be creative in the operations?
4. Explain problems in the Orion program.
5. Explain what can effect the Constellation's progress.
6. Make a T-chart and compare and contrast the Apollo program with the Constellation program.
7. Do the "Your Turn" on page 11.
8. Write a persuasive letter to the president to deep the development of a new space vehicle on target.

#### THE TROUBLE WITH TRANSPORTERS (p.12-15)

Read and discuss.

1. Why did Roddenberry use transporters in his series Star Trek?
2. Why don't we use transporters in real life?
3. What would be required to break all the bonds that hold you together?
4. What do you need to turn all the atoms into energy?
5. If you transported a human, would they be the same when put back together? Explain.
6. What is quantum physics?
7. Which type of transporting has happened?
8. What is a qubits?
9. Why won't quantum teleportation transport people?
10. Why is quantum teleportation useful?
11. Why won't the Australian scientists form of teleportation work for humans?

#### THE SCIENCE OF STAR TREK (P.16-17) and MAKING MOVIES (p.18-19)

Read and discuss Fiction vs. the science of movies.

#### SO REPULSIVE, IT'S ATTRACTIVE! (p.20-23)

Read and discuss.

1. Why aren't there more of the futurist trains now?
2. What two ways can you lift a speeding train?
3. What is the difference between the elevated train at Disney World and the maglev?
4. Following the directions on p. 22-23 design and run a maglev.

Divide class into small groups. Assign the following articles to be read. Have groups create a presentation with a visual and demonstration to share the information.

BUILDING BETTER DRIVERS P. 30-32

OMG! MY DRIVING COACH SAW THAT! P. 32-33

I.D. ME P.33

GROWING TRANSPORTATION P. 36-39

WHEELY SCIENCE P.39

GOING THE DISTANCE...ON A LOT LESS P.40-42

NOW...RELAX, READ, AND ENJOY THE STORY...

ASTRID BELL..."THE CATALOG" P.26-29

Read p. 24-25 and decide which is your favorite mode of transportation. Create a class bar graph showing the favorite modes of transportations. Discuss the mode, the mean, and the range.

Create a bar graph to compare the modes of transportations with the Sears Tower (1,450 feet.)