

Teacher's Guide for ASK: Eruditio

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Scoops: "A Peak Beneath" (p. 2)

Vocabulary: mantle, crust, core

- Discuss how the earth is made up of three main layers.
- Discuss the shifting of plates.

"Quick-Draw Ants" (pp. 2-3)

- Discuss the necessity for the fast snapping jaws.
- What do other insects use to help protect them?

"Carrots or Video Games? Hmm..." (p. 3)

- How are video games helping to improve vision?
- Create a tally chart using 2-4 video games to discover which video games students prefer. Have students draw a bar graph to display the results.

"Nestor's Dock" (pp. 4-5)

- Describe the different ways the children used to learn to tie the double fisherman's knot.
- Write about your personal experience with a task that was difficult. How did you solve the problem?
- Make a drawing about your personal experience. Create your own cartoon using "Nestor's Dock" as a guide.
- In small groups create a short skit on a problem and how it was solved.

"Way Back to School" (pp. 6-11)

- Describe what school was like for each of the different eras.
- Select one era and using a Venn Diagram compare/contrast to present schooling.
- Write about your ideal school. What subjects would be taught? When would you attend? etc.

"Why Practice" (pp.12-15)

Vocabulary: neurons, lobes, cerebral cortex, hemispheres

- Before reading, discuss the topic "Why do we practice?"

- Why was Martha terrified about having the surgery?
- What did she do to surprise the doctors?
- What does a larger cortex for humans mean?
- Why is it important for these experiences to become part of your memory?
- Write about your personal experiences with trying something new. Compare the first time to after you had practiced.

“Lessons for Little Ones” (pp. 16-19)

- How do the young gulls learn to open the clam shells?
- How do polar bears learn to stalk and kill prey?
- Describe how Toothypeg taught her pup to catch worms?
- Draw a picture of one of the animals learning what was described in the article.
- Describe some of the things that your parents have taught you. Compare these with what your classmates have been taught. Why was it important for your parents to teach you these things?

“Which Type of Learner Are You?” (pp. 20-21)

- Create a tally chart of the class result from the checklist. Draw a bar graph using the information from the tally chart.
- Use library or Internet resources to find out more about your learning style.
- Design a poster detailing your learning style.
- Write a letter to your teacher describing your learning style. Explain to your teacher what he/she should do to help you learn according to your style.

“Bird Brains” (pp. 22-23)

- Use library or Internet resources to find out more about how Parrots learn to speak.

“Can Machines Learn” (pp. 24-29)

Vocabulary: intelligence, calculate, scientists

- Can machines learn? Discuss this question before reading the article. Use the board to write down students' thoughts and idea. Read the article and review the question again. How do the students' ideas compare to what they have read. What can be added to their ideas?
- What are some of the ways we are able to determine if an object has intelligence?
- In groups of 2, have students role play the Turing Test conversation. One student should play the computer, while the other plays a real person. Write down the conversation that took place between the two characters.
- What makes ANN different from other computers?
- Create your own machine to help your family. Write about how it helps your family, what it is made of, what it looks like, etc.
- Draw a picture of your machine.