

Teacher Guide for ASK

September 2011: What's in a Face?

Betty Lou Askin, a retired educator, who lives in Toronto Ontario, prepared this guide.

Pre-reading-

- Hold a discussion with the students about the title of this magazine. Maybe you would like to record their responses on a chart paper to compare it with their ideas at the end of reading this issue. A KWL Chart is also a possibility.

Scoops (pages 2-3)

Playing with Fire

- What new information has been discovered regarding Neanderthals?
- Explain how they could start a fire.

Sun-sational

- Describe the sun.
- What are flares?
- Explain how flares affect the Earth.

Silkworms Get New Dye-it

- What is the traditional way to color silk?
- Explain the new way of coloring silk.

Cute Koalas Bellow Big

- Describe how a female koala chooses a mate.
- Explain why the choice of a good bellow is important.

Nestor's Dock (pages 4-5)

- Explain why Lonna was making so many ugly faces.
- Why did Phil and Nestor warn Lonna about her facial expressions?

What Are Faces For? (pages 6-13)

Vocabulary: macrobats, microbats, megaphones, notochord, vertebrates, invertebrates, predators, preys, cartilage, proboscis, iris, sclera, neurons.

Ideas to use with this article:

- Describe Leafy Nose.
- Tell about the diet of Foxy Face.
- Describe how microbats locate their food.
- What is a *notochord*?
- Explain why faces evolved.
- Explain why it is good to have two eyes.
- Describe an animal that has no face. Do they need a face?
- Why are the eyes of prey animals different?
- Explain why the eyes of the hammerhead shark are well designed.
- Tell how some noses are well developed for 2 creatures.
- Explain why the human face is strange.

- Describe the role of a human's 44 facial muscles.
- Why is the human face important to a newborn baby?
- What is the most important role of a human's face?

Making Faces (pages 14-15)

- Before looking at or reading this section, have a discussion with the students about facial expressions. Use the 6 emotions and add others if desired.
- Divide the class into groups.
- Put the word *joy* on the chalkboard.
- Assign one student in each group to act out the emotion, while the other students make notes about how a face changes when emotion is shown. Repeat with other emotions being expressed.
- Discuss what the students recorded. Compare their findings by reading the top sections of pages 14-15.
- The article "What Did King Midas Look Like" will refer to the placement and form of a person's face. If you are not familiar with portraiture, you may wish to read ahead and use the information on pages 24 and 25 during an art lesson.
- Follow the instructions for drawing a portrait.

Should Robots Have Faces? (pages 16-19)

- Why do you think that humans are interested in faces?
- Explain why Maja Mataric didn't want her robot to look too much like a human.
- Explain the "uncanny valley".
- Describe Hanson's robots.
- Why does Hanson believe that robots should look like humans?
- What does Maja Mataric's research tell us about robots?
- Ask the students to respond to the sidebar on page 19.
- Creative Work: Ask the students to make pictures or models of robots.

Face to Face (pages 20-21)

- Discuss the photographs on these pages.
- Ask the students to look for or think of other items that could be seen as a face. This might be a homework assignment.

What Did King Midas Look Like? (pages 22-27)

- Pre-reading: Ask the students what they know about King Midas.
- Use the Read Aloud method to read this article.
- Why do you think that nothing was done with the skull of King Midas for 30 years?
- What does a person's skeleton tell scientists?
- What does a person's skeleton not reveal to scientists?
- Describe the process that Neave used to reconstruct the Fayum mummies.
- Do you think that Neave's reconstructed face of King Midas is accurate? Explain your answer.

Find a Face (page 31)

- Let your students respond to the contest. Make a bulletin board display of their work.

Jimmy the Bug (page 32)

- What is the purpose of the “washer fluid” in your eyes?
- What is a reflex?
- Describe the reflex of your eyes.

Marvin and Friends

- Describe how Plush Pottom wanted to be seen in her portrait.
- Why was she dismayed?
- What was Marvin’s style of art?
- What does self-expression mean?