

Teacher Guide for ASK

March 2013: Hair, There and Everywhere

This guide was prepared by Betty Lou Askin, a retired educator, who lives in Toronto, Ontario.

Objectives:

- To learn about the function of hair on humans and for a variety of animals.
- To discover that some animals have no hair or very little on their bodies.
- To appreciate various hair styles throughout history.

Pre-reading:

- Let the students suggest what they think might be included in this issue of ASK based on the title.
- Ask them what they think is happening on the cover.
- View the Contents page and discuss the illustrations and the article titles.

Scoops

Beetles in Boots

- Name 3 reasons why dung beetles roll dung balls.
- Describe the experiment that scientists conducted.
- What was the conclusion?

Message in a Bottle

- Use a World Map to locate the Shetland Islands.
- Explain why this bottle was in the sea.

Monkey See Monkey Do

- Where was this new species of monkey found?
- What is a primatologist?
- Why do the lesulas need to be protected?

Don't Try This at Home

- What distance did Baumgartner sky dive?
- How was he protected?
- What was the purpose of this experiment?
- Ask the students to look for more science "scoops" when they read printed material and watch television news/shows. Create a bulletin board to post their findings.

Nestor's Dock

- Explain why each of the friends chose their particular hair style.

Mane Attraction

Reading for information:

- Why do you think the lioness chose the lion with the dark mane?
- Which lions grow manes?
- Describe different types of lion manes.
- Why did Charles Darwin suggest that lions have manes?

- Why was this not a complete reason for lions having manes?
- Explain what West discovered about lion fights and manes.
- What does the growth of lion hair depend upon?
- Explain why a strong dark mane is preferable?
- Describe how West set up her experiment.
- What was the conclusion of her experiment?

The Buzz about Dino Fuzz

Use these questions during or after reading this article:

- Describe the bristles of a Tianyulong.
- Why was the discovery of Tianyu Pong important?
- What information was learned from well preserved feathers?
- What does **keratin** produce?
- What are "proto-feathers"?
- What new information has been discovered about Triceratops?
- Explain why dinosaurs needed feathers?
- For what might dinosaurs use spines and fuzz?

Hair Today, What Tomorrow?

Questions to use with a discussion:

- What is considered natural hair loss for humans?
- Give two reasons why hair is good for a garden.
- Why is wool a good product?
- Explain why hair is beneficial to the ear.
- What important information can hair provide?
- How is felt made?
- Tell why hair helps with DNA testing.

Hair that Feels

Reading for understanding:

- How do manatees use their hair?
- Explain how whiskers help an animal.
- Why would a manatee's hair need to be more sensitive than a human's?
- Explain how Hugh and Buffett were tested.
- Describe how manatees use the bristles around their mouth.
- Why do scientists think that manatees can sense motion?

Hairstyles in History

Use these as a focus:

- Why did the Egyptians wear wigs?
- What style of hair-do did the Roman women prefer?
- How did hairstylists display their wigs?
- Describe the attitude in the Middle Ages regarding hair.
- How did people change their hair color in Venice?
- Explain how Samurai wore their hair.
- Describe the Manchu queue.
- What style became popular in Europe?
- In the late 1700's, what type of wig became popular?
- What type of wig continues to be part of a traditional outfit?

- Describe the Mohawk style of hair-do.
- Give two reasons why people shaved their heads in past centuries.

Why Are Naked Mole Rats Naked?

Ask the students to work with a partner. Have them take turns reading this article aloud and then to answer these questions. When they are finished, hold a class discussion.

- Describe the life style of the naked mole rat.
- What does cold-blooded mean?
- Make a list of reasons why these rats have no hair or fur.
- Why are humans mostly hairless?

Jimmy the Bug

- Which plant leaves are poisonous?
- Name some helpful poisons.
- Why do plants make poisons?
- Why do plants evolve new poisons?

Don't forget to-

See dung beetles cooling it at www.askmagkids.com/links

Watch Baumgartner's record sky dive at www.askmagkids.com/links

Follow the instructions for the Contest and share your ideas with your classmates.