

APPENDIX 3

Student Activity Sheets



VIDEO QUESTION SHEET

1. List ALL of the venomous snakes found in Ontario.

2. Name 3 visual characteristics that can help you to tell a massasauga rattlesnake apart from a fox snake or milk snake.

3. List 2 reasons why it can be tricky to tell a massasauga apart from some other snakes.

4. What do rattlesnakes do in the winter?

5. How does a rattlesnake regulate its body temperature?

6. Describe a massasauga rattlesnake's "personality."

7. What should you do if you come across a massasauga rattlesnake in the wild?

8. What should you do if a rattlesnake bites your dog?

9. What should you do if a rattlesnake lives on your property or campsite?

10. List 3 safety tips you should follow in rattlesnake country.

Note: All rattlesnake encounters, identification opportunities, and transportation of snakes should be undertaken by *adults*, preferably after suitable training. Toronto Zoo and recovery team members offer workshops and training in relocating rattlesnakes to secluded areas of your property.

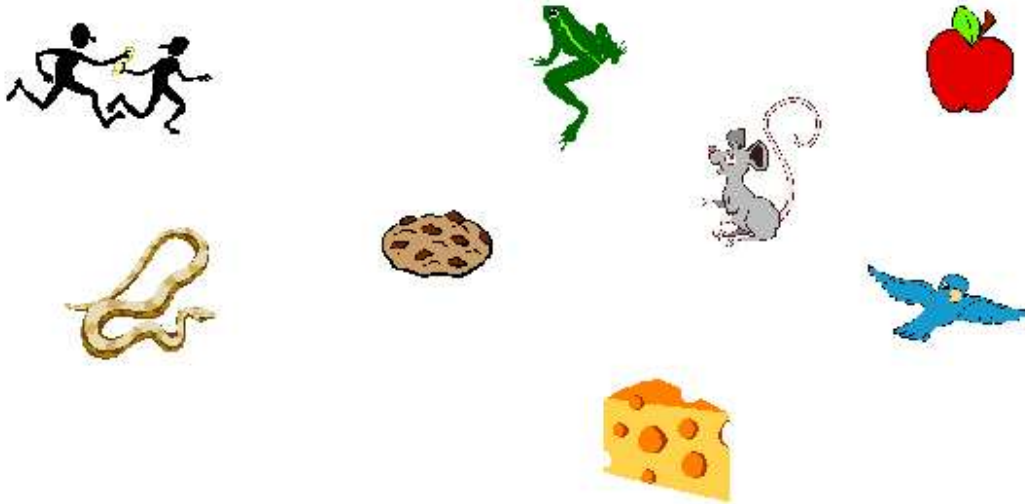
UNIT 1

ACTIVITY 1.1

MONSTROUS APPETITES

QUESTIONS

1. Draw lines to show what the people eat and what the snake eats.



2. Look at the pictograph below and answer the following questions:

- a) How many meals in a week does a snake eat? _____
- b) How many meals in a week does a person eat? _____
- c) Who eats more in a week (a snake or a person)? _____



UNIT 1

ACTIVITY 1.1

MONSTROUS APPETITES (Continued)

QUESTIONS

1. Scientists gathered information on the number of meals snakes eat and compared these results to humans. Their results are shown in the table below:

	Humans	Snakes
Week	21	2
Month	90	9
Year	1095	110

a) Create a bar graph from these results. (Remember to include a title and label the axis.)

b) Looking at your graph, which type of animal makes most efficient use of their food energy (you or the snake)? Why?

2. Snakes are cold-blooded (ectothermic) animals. What does the term “cold-blooded” mean?

3. Using your knowledge about cold-blooded animals, why do snakes eat less food than humans?

4. A raccoon and a snake have landed on an island in Georgian Bay. If food were scarce, which animal would survive longer? Why?

UNIT 1

ACTIVITY 2.1

MAKING SCALES

ISSUE

What are the different scale types found in Ontario snakes?

BACKGROUND INFORMATION

Snakes have *smooth* or *keeled* scales. Different types of scales help us to identify different types of snakes. In this activity students will make a snake with smooth scales, using squash or cucumber seeds, and a snake with keeled scales, using sunflower seeds, so that they can gain an understanding of the difference between the two.

MATERIALS

- 2 lumps of Play-Doh, Silly Putty, etc.
- 2 sheets of thin cardboard or heavy paper
- 1 package of sunflower seeds (with shells)
- 1 package of pumpkin seeds

METHOD

1. Roll out the clay into a snake shape, about 3 centimetres wide and stick it down on the cardboard.
2. Shape the head and tail. Add a tongue for fun!
3. Starting at the tail end, stick the sunflower seeds flat (broadside) down into snake's back. Put the seeds as close together as possible. The second row will overlap the first row. Continue adding rows of seeds until you run out of seeds (each student group may need to use only a handful of seeds to make comparisons).
4. Repeat steps 1 to 3, using pumpkin seeds instead of sunflower seeds, to create a second snake.

QUESTIONS

1. Compare the two snakes. How do they look? How do they feel?

2. Look at the "Snakes of Ontario" poster.

- a) Name a snake with smooth scales. _____
- b) Name a snake with keeled scales. _____
- c) What type of scales does the Eastern Massasauga Rattlesnake have? _____

UNIT 1
ACTIVITY 2.1
MAKING SCALES (CONTINUED)
Follow-Up Activity for Grade Six

1. Draw a keeled scale in the box below.

2. What part of the scale does the paper touch as it rubs against it?

3. What does each of the following structures represent on a snake?

- a) Play Doh mound _____
- b) Cardboard _____
- c) Pinched Ridge _____
- d) Paper _____

4. What purpose does the pinched ridge serve in the snake?

5. Define “keeled scale”.

6. List 2 other possible functions for the keel.

UNIT 1

ACTIVITY 2.3

THE GREAT SNAKE DETECTIVE

Rattlesnakes are covered with patterns and colours that help them hide from predators. This camouflage lets them blend into the environment. How many snakes can you find in the following picture?

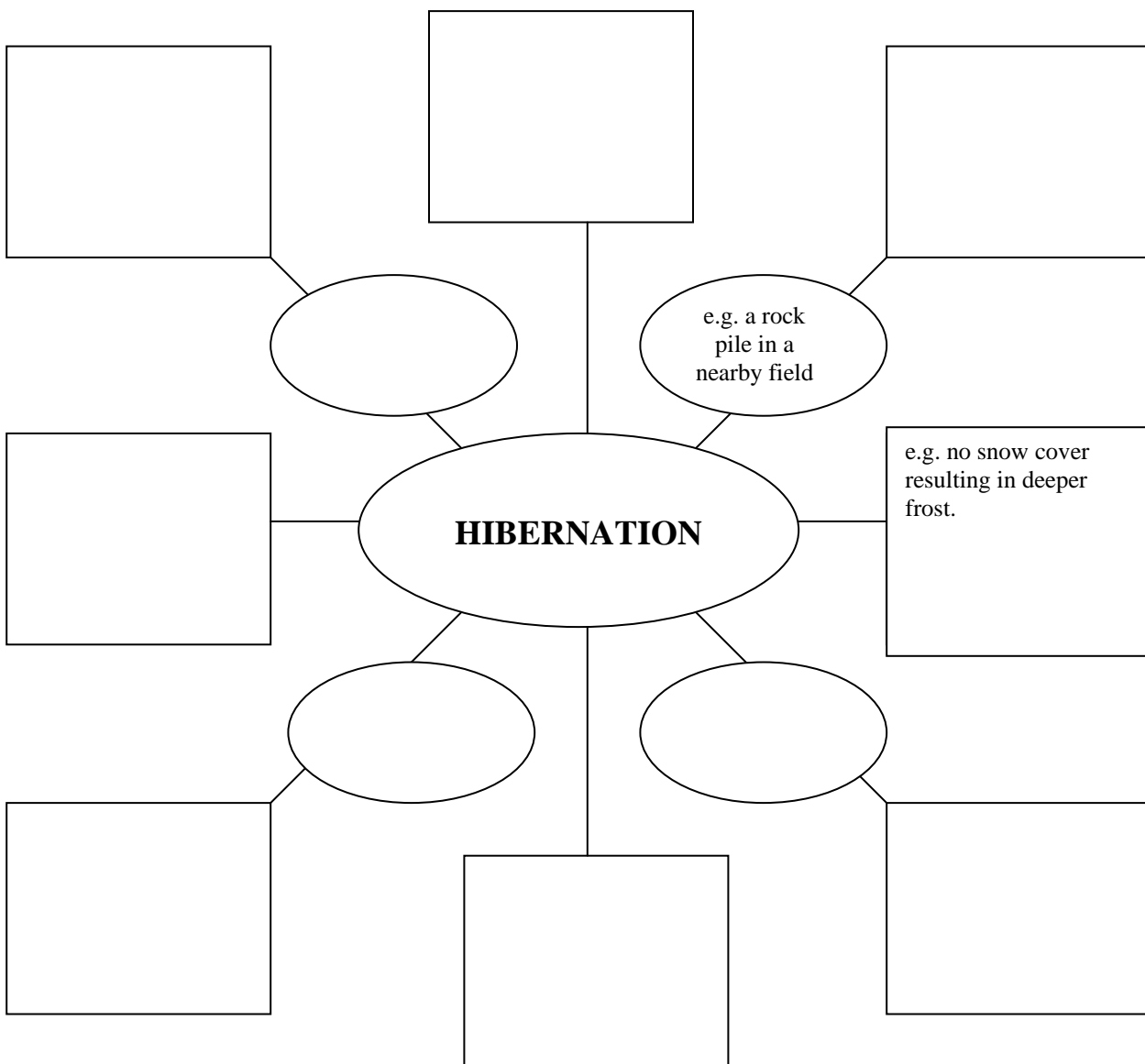


UNIT 2

ACTIVITY 1.2

A MATTER OF LIFE AND DEATH

Using a large sheet of paper and the markers provided by the teacher, design a "Mind Map" like the one shown below. In the bubbles, write all the different places that you can think of that might make a **good hibernation site** for a snake. In the squares, write all of the things that you can think of that could prevent a snake from **surviving the winter months**.



UNIT 2

ACTIVITY 2.1

THE CHAIN GANG

METHOD

By linking up plants and animals in the correct order, you can build your own food chain. Compare your food chain with other food chains in the class and make a food web.

1. Create a list of all the organisms that live in the same habitat as a rattlesnake.
2. Choose your favourite animals and incorporate them into a food chain. Do not forget to include a producer in your food chain!
3. Cut out cardboard cards (12 cm X 9 cm), one for each animal in your food chain. Write the name and draw a picture of each animal from your list on a separate cardboard card.
4. Study your cards and decide which order they should be in.
5. Use tape and string to attach the cards in the correct order.
6. Write the role each organism plays in the food chain on the bottom of each card.
7. Explain your food chain to the class.
8. Now find classmates who have links similar to yours, but as a part of a different food chain.
9. Figure out how to join the food chains together, overlapping the links that are the same. Now you have a food web!

QUESTIONS

1. How many links are in your food chain? _____
2. How many links are in your food web? _____
3. Do you think it is better for animals to eat only one food or many different foods? Explain.

4. Why are plants called “producers?”

5. Is more or less energy available as you move up the food chain? Explain your answer.

6. What is the difference between a “scavenger” and a “decomposer?”

UNIT 3

ACTIVITY 1.3

MISSING LINKS

Fill in the missing letters to complete the story:

One sun_y summer day I was wa_king through the w_ods. The birds were si_ging and an _range butterfly landed on my shoulder. It was my _ucky day. I looked over at a large f_at ro_k. It looked like an o_dinary gr_y rock. Suddenly I noti_ed a beautiful _nake cur_ed up on the rock. I was car_ful not to get any closer but I sto_d adm_ring the sna_e as the snake wa_ched me. The snake was not very b_g. It was grey and had b_ack s_ots on its bac_. I reme_bered seeing a pi_ture of this s_ake at sc_ool. It might have been a ma__asauga ratt_ _snake. Eventually the snake un_urled itself and s_owly slit_ered o_f the rock and under a l_g. I went o_er and touc_ed the rock. It was ver_ warm. I kept on walking carefully in the woods but I sta_ed away from the log where the snake wa_hi_ing. It was f_n to watc_ the snake war_ing up in the su_. It really was my luc_y day! I visited the r_ck several t_mes over the _ummer but ne_ver saw the _nake again. I hope that one day you will be lucky enough to see a snake too!

Draw a picture to represent the story you just completed.



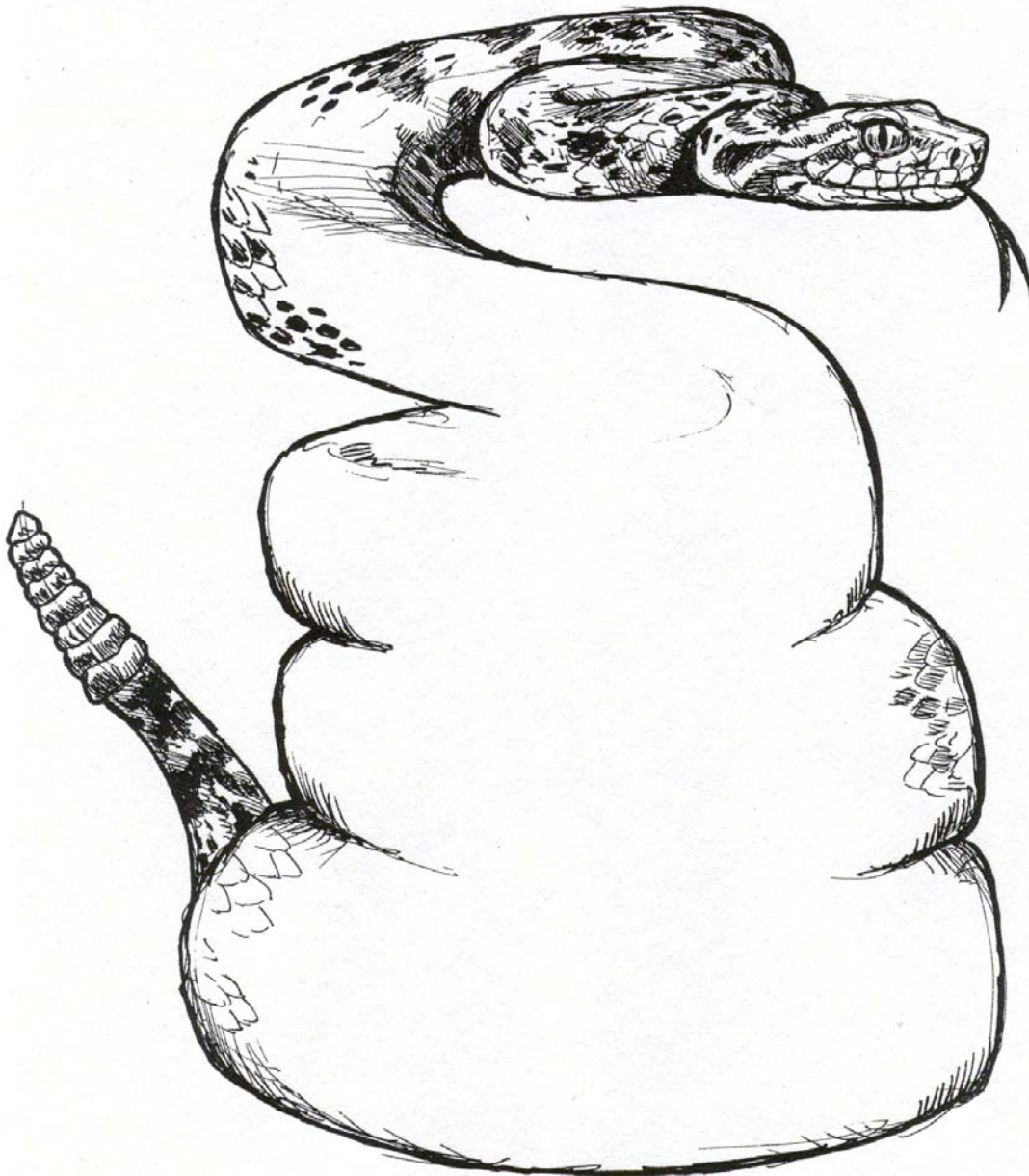
UNIT 4

ACTIVITY 1.4

LET YOUR CREATIVE JUICES FLOW!

Cross-Curricular

Compose your own snake poem, story, or picture book. Try to remember everything that you have learned about snakes as you write. This is a great opportunity to explore different writing styles, while integrating factual information and imagination. You can write the final draft of your poem or story on the shape below. This shape could also be used as a stencil to create a snake shaped book.



UNIT 4

ACTIVITY 1.5

RATTLESNAKE POSTER CAMPAIGN

Cross-Curricular

The massasauga rattlesnake is in trouble in Ontario. Habitat destruction and the relentless persecution of this snake by humans are the main problems. Part of the solution resides in public education.

Posters can be an effective tool since they are versatile and can be viewed by people in classrooms, grocery stores, on the street, in libraries, or at the zoo.

Design a poster to help save the eastern massasauga rattlesnake. Choose a target audience and develop the poster accordingly. Design a slogan and/or logo. Include a conservation message.

Once the poster is completed, compare it with the posters designed by the Zoo that are included in this education package.

Send the final products to the Zoo. We would love to see your work! We may even publish your conservation poster in "Rattlesnake Tales."