

# SUPER SNAKE'S

## GUIDE TO SUMMER FUN

(AND CONSERVING THE PLANET)



The fun games, activities, and contests in this little book can help sharpen your school smarts and save the environment in a BIG way!

Created by:

Students in the JHU Museum and Society Program  
in cooperation with Students at Arlington Elementary/Middle School  
and The Maryland Zoo in Baltimore

**SUPER SNAKE vs. SLY SERPENT**  
Learn more about how cool recycling

Learn more about how cool **recycling** can be by creatively filling in the blanks in the story below. Read your silly story out loud for lots of laughs!

Super Snake heard the \_\_\_\_\_ [adjective] sound of his enemy, The Sly Serpent,

[verb+ing] down the hall of The Baltimore Reptile Academy, Super Snake turned around \_\_\_\_\_

[adverb] to discover The Sly Serpent \_\_\_\_\_ [verb+ing] \_\_\_\_\_ [number] \_\_\_\_\_

plastic bottles into the trash can instead of the recycling bin.

<sup>a</sup>Stop!" Super Snake exclaimed \_\_\_\_\_. "You can recycle those \_\_\_\_\_ [adjective] bottles!" \_\_\_\_\_

"You can't stop me," hissed The Sly Serpent. "I'll never recycle!"

"This seems like a job for Super Snake!" Super Snake thought \_\_\_\_\_. [advrb]. Super Snake \_\_\_\_\_ [verb-ed] over to the \_\_\_\_\_ [color] trash can and gathered up all of the plastic bottles and other \_\_\_\_\_ [plural noun] that should have been recycled. Using those items, Super Snake then built a huge \_\_\_\_\_ [adjective] robot!

"Don't let the robot hurt me!" The Sly Serpent said to Super Snake, "I'll do anything!"

"\_\_\_\_\_ [name] the robot won't hurt you as long as you promise to recycle instead of throwing everything away. Recycling helps the environment by reducing waste, pollution, and energy use. And just look at all the cool, \_\_\_\_\_ [adjective] things that you can make with recycled items!" Super Snake said, pointing to the robot.

"You're right!" The Sly Serpent exclaimed. "Recycling is really \_\_\_\_\_ [adjective]! I want to learn more! Thank you Super Snake."

Turn to the back cover to learn how to make your own recycling project using empty bottles and other trashy materials!

Zoo vets use math skills to help animals in the wild. For example, they go into the woods of western Maryland and measure bears cubs to make they are growing normally. How big do cubs get? Fill out the chart below to find out!

Hint: To calculate approximate feet, multiply meters by 3.28.

Black Bear Type	Length (cm)	Length (m)	Length (ft)
Cub	23.0		
Adult Female		1.90	3.90
Adult Male			

1. In meters, how much bigger is an adult male black bear compared to a cub?
2. What is  $\frac{1}{2}$  of an adult female bear's length in feet?

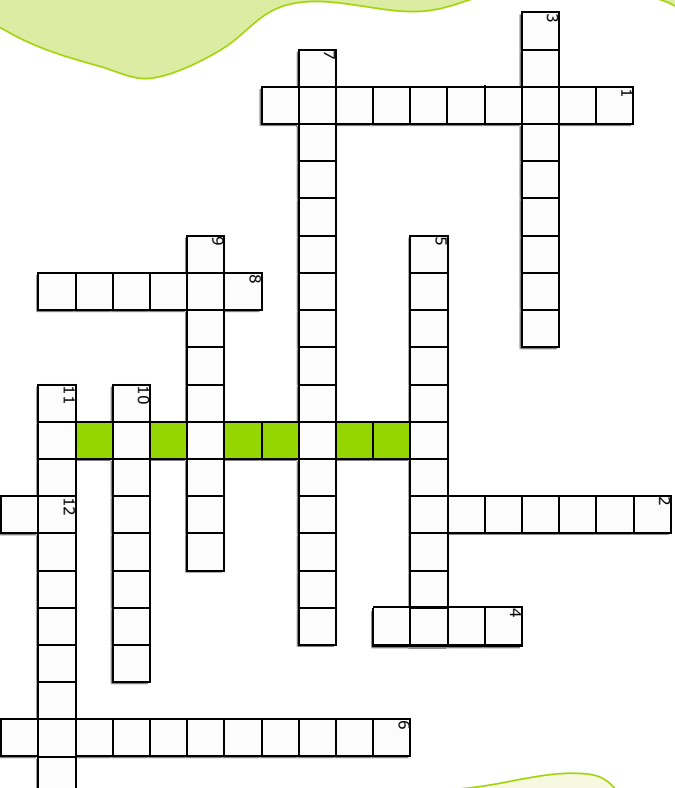
**Bonus Question:** If 1 meter is approximately equal to 3 feet, can you write a math rule to convert cm into ft?

\* 1 foot = 3.28 meters

Help Super Snake continue to win the battle of recycling! Use your skills to play Recycle City Dumptown, <https://www3.epa.gov/recyclecity/>.



Fill in this crossword puzzle to show what you know about the animals in Baltimore. Do you ever see these animals near your home or school? Look for them this summer!



Brown Bat  
Box Turtle  
Raccoon  
Coyote  
Cottontail Rabbit  
Fence Lizard  
Deer  
Garter Snake  
Hummingbird  
Cicada  
Black Widow  
Black Bear

1. This varanid is native to Maryland. Its venom can be dangerous to people.
2. This animal has a ringed tail and masked face animal and often eats from garbage cans.
3. This animal lives near trees but can also be found crossing the street, leaving hoofprints.
4. A longbeaked bird that sips nectar from flowers and quickly beats its wings.
5. This pointed-eared animal is part of the dog family and hides from people in the woods.
6. This insect buzzes and clicks. It appears every 17 years and lives in swarms in trees.

3. A den-dwelling animal that lives throughout Western Maryland.
5. Common in wooded areas and fields, this reptile slithers and has three yellow stripes.
7. This animal hops around many backyards because it is well adapted to human habitats.
9. A reptile found in muddy areas that protects itself with its shell.
10. A nocturnal mammal that lives in roosts, which may be human-made structures.
11. A speedy reptile that darts up tree trunks and camouflages to avoid birds-of-prey.

## DIRECTIONS

1. Find a small item to use as a game piece (ex. a rock or coin).
2. Place game pieces next to the word "Start."
3. Write numbers 1-6 on individual scraps of paper and place in a bowl.
4. The first player shakes up the bowl and draws a number, then moves that many spaces on the board.
5. When you land on a space, check the number on the space and find the question that has the same number on the side of the board.
6. After you answer the question, check the answer key on the bottom of the page and follow the instructions on the question.
7. Pass the number bowl to the next player.
8. Continue this process until one player wins by reaching the Zoo exit first!

## MARYLAND ZOO ZOOM

Grab some friends and play this game to learn more about your favorite zoo animals and why they are important to the natural world. Who will zoom through the Zoo first?

### POLAR BEAR WATCH

10. Arctic ice is melting due to climate change and polar bear populations are declining because of it! Move back 3 spaces.

11. African penguins are endangered. Why? If you answer correctly, move forward 1 space.

12. How do you think littering may harm animals in your neighborhood? Move forward 1 space for each answer you come up with.

13. You landed on the Zoo train! Take a ride 3 spaces forward.

14. Find one piece of trash. If you can recycle it, move forward 2 spaces. If you throw it away, move forward 1 space.

15. What is the African lion's habitat? Move forward 1 space for a right answer and 0 spaces for a wrong answer.

16. Where is the only place in the world that ring-tailed lemurs live? If you answer correctly, move forward 1 space!

17. You landed on the endangered chimpanzee! Move back 3 spaces.

18. Where do African bullfrogs go during the dry season? If you answer correctly, move forward one space.

19. Why do poachers hunt African elephants? If correct, move forward 1 space.

20. What is the African lion's habitat? What is the biggest threat to their habitat? Move forward one space for 1 right answer, and 2 spaces for 2 right answers.

## START

1

2

3

4

5

6

17

18

19

20

EXIT

### MARYLAND WILDERNESS

8. Many animals at the Zoo are herbivores. Name one thing that herbivores eat and one thing they don't. If correct, move forward 2 spaces. If wrong, move back 1.
9. Eastern box turtles are very common in Maryland! If you see a box turtle in your neighborhood, what should you do? If correct, move forward 3 spaces. If incorrect, stay where you are.

7

8

9

10

11

12

13

14

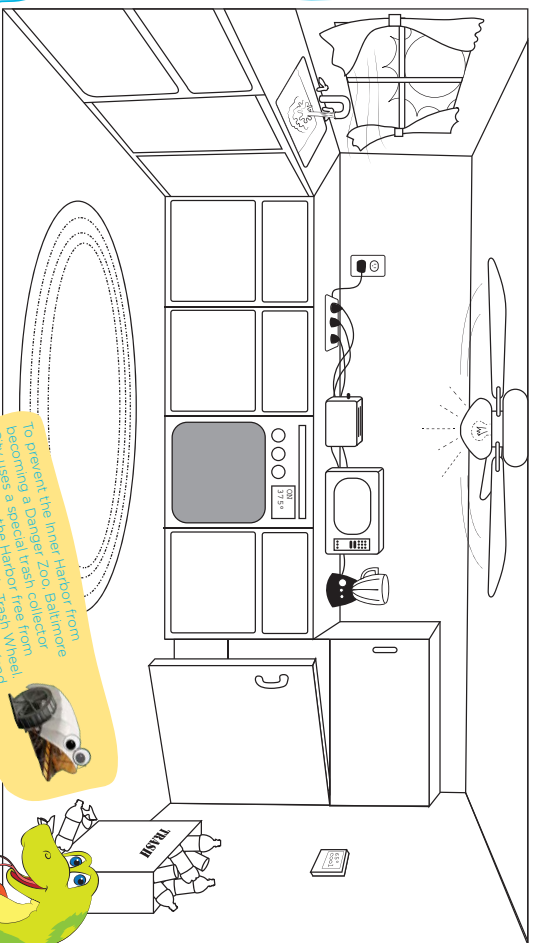
15

### AFRICAN JOURNEY

1. Trash that is left outside and not thrown away or recycled pollutes rivers and streams and Helibenders will not be able to live there anymore. 2. Turn off light when you leave a room. 3. They research ways to preserve natural habitats and educate people about going green. 4. Turn off light when you leave a room. 5. Turn off light when you leave a room. 6. Turn off light when you leave a room. 7. Make honey and pollinate flowers. 8. Herbivores eat grass, plants, and seeds but not other animals. 9. Observe, but do not disturb or touch it! 10. Overfishing and over population. 11. Lions are found in Africa's plains and savannas. Their habitats are open woodlands and grassy areas. 12. Ring-tailed lemurs only live on the island of Madagascar. 13. You landed on the Zoo train! Take a ride 3 spaces forward. 14. Find one piece of trash. If you can recycle it, move forward 2 spaces. If you throw it away, move forward 1 space. 15. What is the African lion's habitat? Move forward 1 space for a right answer and 0 spaces for a wrong answer. 16. Where is the only place in the world that ring-tailed lemurs live? If you answer correctly, move forward 1 space! 17. You landed on the endangered chimpanzee! Move back 3 spaces. 18. Where do African bullfrogs go during the dry season? If you answer correctly, move forward one space. 19. Why do poachers hunt African elephants? If correct, move forward 1 space. 20. What is the African lion's habitat? What is the biggest threat to their habitat? Move forward one space for 1 right answer, and 2 spaces for 2 right answers.










## DANGER ZONES

A danger zone is something that uses too much energy or water, or creates too much trash, which can hurt the places where wild animals live. Can you find all 8 Danger Zones in this kitchen?



## LOCAL ANIMAL SCAVENGER HUNT

Score high on this scavenger hunt and learn about animals in Baltimore that have adapted to living around humans. Keep track of your score by adding the points. Endangered animals have higher scores. Complete with your friends and family to see who is the best Wildlife Watcher! To learn about these animals and what you can do to help them, visit [marylandzoo.org](http://marylandzoo.org).

2		1		This sink bug didn't live in the US until 20 years ago. Now they're everywhere, even in your home.
3		1		This invasive species can be found in many neighborhoods and parks around you on fences and climbing up walls.
2		3		You can find them anywhere there's water, in rivers, ponds, streams, and even parks around your neighborhood!
5		4		Eagles can be found in large trees. They have remarkable eyesight and can see a rabbit from almost two miles away!
5				

Danger Zones Answer Key: 1. Fridge open 2. Stove on 3. Window open with fan on 4. Curtains open with light on 5. Too many appliances plugged in 6. Plastic bottles in trash can 7. Thermostat on COOD w/ fan on 8. Sink left running

## ECO-OLYMPICS

### WHICH MEDAL WILL YOU WIN?

Read the questions below, circle your answer, and then add up your points to find out where you place in the Eco-Olympics!

- Do you turn the lights off when you leave a room?**  
yes (+10pts)  
sometimes (+5pts)  
no (+0pts)  
*Why: Turning off the lights when you leave a room saves energy, which helps preserve precious resources and save money!*
- Do you take showers in five minutes or less?**  
yes (+10pts)  
sometimes (+5pts)  
no (+0pts)  
*Why: Showers use an average of 2.1 gallons of water a minute. That means one shower uses enough water to fill a whole fish tank!*
- Do you recycle at home?**  
yes (+10pts)  
sometimes (+5pts)  
no (+0pts)  
*Why: Recycling helps protect natural habitats by reusing waste instead of consuming more!*
- Do you keep the water on while you brush your teeth?**  
yes (+10pts)  
sometimes (+5pts)  
no (+10pts)  
*Why: Water is a limited resource. It's important to use it only when necessary!*
- Do you wash your clothes with only cold water?**  
yes (+10pts)  
sometimes (+5pts)  
no (+0pts)  
*Why: Heating water requires energy. Cold water works just as well!*
- Do you use a reusable water bottle?**  
yes (+10pts)  
sometimes (+5pts)  
no (+0pts)  
*Why: People worldwide consume 50 billion plastic water bottles each year. Plastic water bottles take over 100 years to decompose so most end up sitting in landfills taking up space that could be filled with grass and trees instead.*
- How do you get to school?**  
walk/bike (+10pts)  
drive (+0pts)  
public transportation/carpool (+5pts)  
*Why: The less people drive the better. Cars use a lot of energy and emit gases harmful to the environment.*
- Do you leave trash on the ground outside?**  
yes (+10pts)  
sometimes (+5pts)  
no (+10pts)  
*Why: Most trash doesn't decompose which means it will never go away. This damages natural habitats and can put local animals at risk.*
- Do you leave electronic appliances plugged in even when you aren't using them?**  
yes (+10pts)  
sometimes (+5pts)  
no (+10pts)  
*Why: Even when you aren't using electronic appliances they still use something called "phantom energy" which is energy used by just being plugged into the wall.*

## YOUR SCORE

90-70pts

GOLD

60-30pts

SILVER

30-0pts

BRONZE

You're an Eco-Champion! You take great care of the environment. Keep up the good work by trying even more of the good habits mentioned above and continuing the ones you are already doing.

You're Eco-Friendly! You take care of the environment but there is still room for improvement by including more of the good habits mentioned above.

You're Eco-Aware! You are starting to get the idea but there's plenty of room for improvement! Try out some of the good habits mentioned above to improve your score.

# GLOSSARY

- **Adapt** – When a group of animals changes over time to fit better with the environment
- **Biodiversity** – The condition in nature where many different plants and animals live in a single area
- **Climate change** – Refers to overall changes in the Earth's climate patterns, including temperature, amount of rain, winds, and other human-caused factors
- **Colony collapse disorder** – When all the adult honeybees in a colony suddenly disappear; the colony breaks down because there are not enough worker bees to maintain the colony
- **Danger zone** – A situation, event, or action that could cause harm to the environment
- **Ecosystem** – Everything that exists in a particular environment including living things, such as plants and animals, and things that are not living, such as rocks, soil, sunlight, and water
- **Endangered** – When an animal or plant has become very rare and could become extinct, usually because of human activity
- **Environmental challenges** – Problems with the planet or the environment that are often caused by humans
- **Habitat** – The place where a plant or animal usually is found
- **Habitat destruction** – The loss of a species' home, usually caused by humans when we build houses or roads in natural areas
- **Invasive species** – Plants, animals, or other organisms that are not native to the area where they are found; since they don't belong in the location, their presence can cause harm to the environment or to humans
- **Nocturnal** – Active during the night
- **Migrate** – The movement of a group of animals from one place to another and, in most cases, back again
- **Recycling** – To make something new from something that has been used before
- **Upcycling** – Taking an item that is no longer needed or wanted and giving it new life as something that is either useful or creative

## CREATIVE ESSAY CONTEST

Work your creative juices and see how much you have learned from this booklet! Imagine that you are a super hero, ready to protect the planet from environmental harm. Using the glossary terms above, tell us a story of how you can help your community. Mail your creative story by August 31, 2016 to **The Maryland Zoo in Baltimore, Education Department, 1876 Mansion House Dr., Baltimore, MD 21217** or email to [lori.finkelstein@marylandzoo.org](mailto:lori.finkelstein@marylandzoo.org) for a chance to win a prize.

**Finished the booklet?  
Tell us what you think! Complete the survey at  
[www.surveymonkey.com/r/MDZooSummerFun](http://www.surveymonkey.com/r/MDZooSummerFun)  
for a chance to win an AMAZING prize.**

## UP-CYCLING PROJECT

Upcycling means finding ways to turn our trash into something new instead of throwing it away. Compete in the Zoo's **Upcycling Challenge** by turning an empty plastic bottle into a work of art, or into a beautiful zoo animal, like a lion, penguin, raven, or elephant. Or, you can make an alligator from plastic bottles and toilet paper rolls.

What else can you come up with?

Send a picture of your creation  
by August 31, 2016 to  
[lori.finkelstein@marylandzoo.org](mailto:lori.finkelstein@marylandzoo.org).

The winner of the challenge will receive a special prize.

