

Welcome to the Microban 24 24-Hour Science Experiment!

We know this school year is unlike any other, but the learning must go on!

Learning about science and bacteria can be really fun. Whether you're learning at home, attending school in person – or both – the Microban 24 24-Hour Science Experiment will help you learn about bacteria, and how they spread and grow.

Do you know what bacteria are? Bacteria are the smallest of all living organisms on Earth and can be found in the bread you eat, the soil that plants grow in, and even inside of your body. Bacteria can be good or bad. Good bacteria is helpful – they help us survive, digest food, absorb nutrients and more. Bad bacteria can be harmful, causing food to spoil, illnesses or diseases.

Bacteria actually spreads very easily and every time you touch a surface, your face and even your food, bacteria is traveling along with those touches.

With the Microban 24 24-Hour Science Experiment, you can do a hands-on experiment and play fun games to learn all about bacteria.

So let's get to it!



Welcome

24-Hour Science Experiment



Ages 5-9

Bacteria Growth on Food

In this experiment, you are going to learn about how bacteria grows and where bacteria lives around your house! First thing's first – we'll search your home or classroom to find bacteria. Once we find the bacteria, we're doing to conduct an experiment to see how it grows.

Supplies:

- A few slices of bread, potatoes or cooked noodles
- Sandwich baggies that can be sealed
- *Experiment in Progress* sign

Instructions:

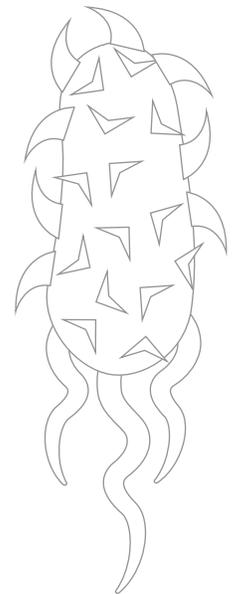
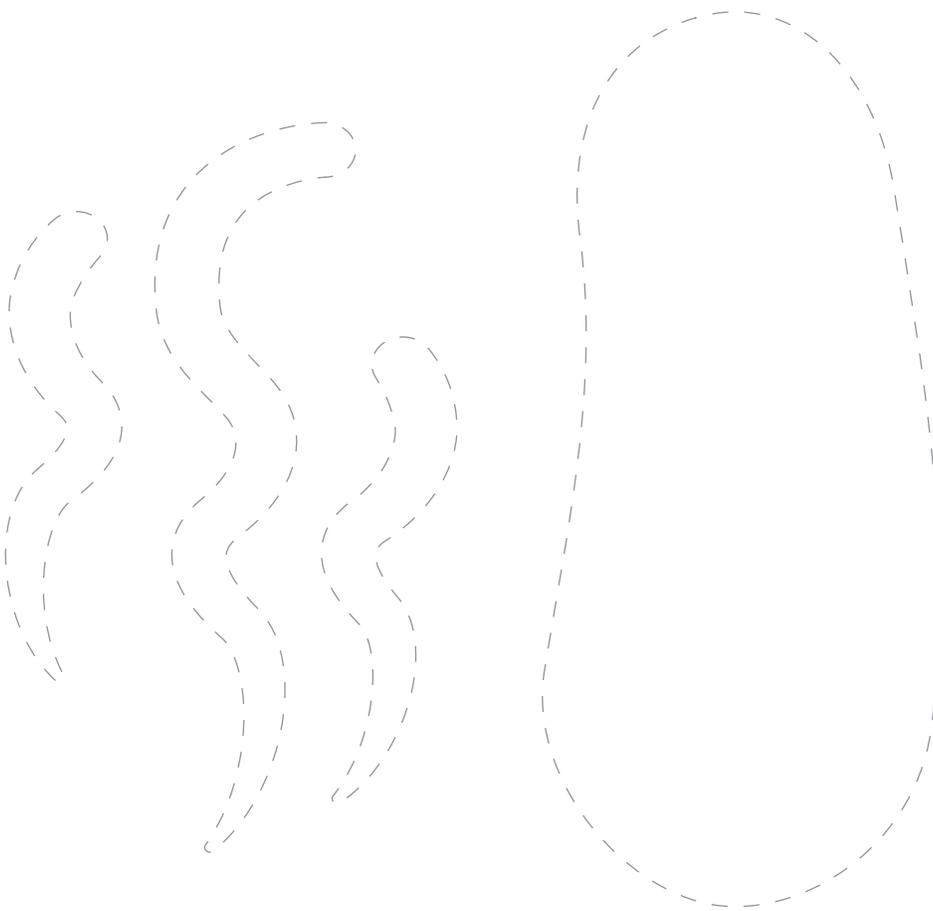
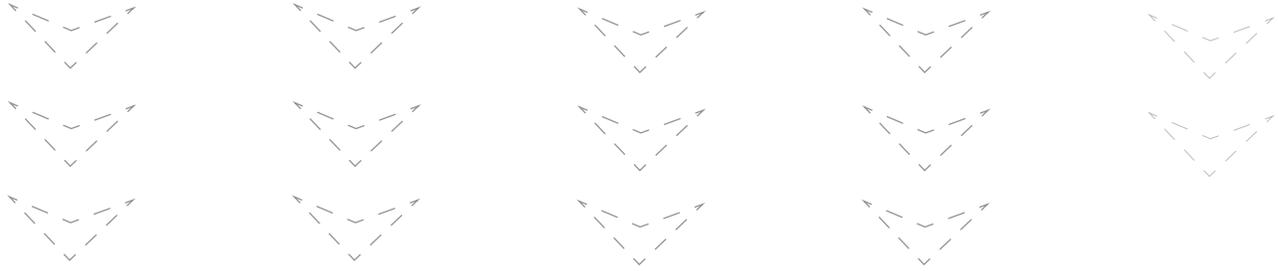
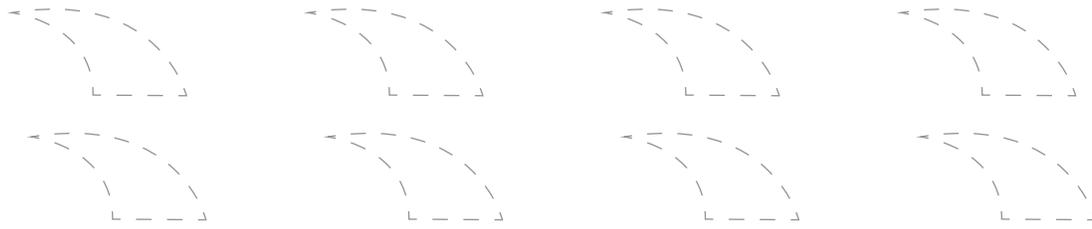
- 1) Find a hard, flat surface to conduct your experiment. This can be a table or countertop.
- 2) Take out a piece of bread – this will act as home for the bacteria you find. If you don't have bread at home, you can also use a potato or cooked noodles.
 - If you're using potatoes, ask an adult to slice the potato into round slices.
 - If you're using noodles, ask a parent or guardian prepare the noodles according to the noodles' packaging instructions.
- 3) Once your food item is ready to go, it's time to find the bacteria. Think about the things your family touches the most – a doorknob? Maybe it's a light switch, or it could even be the television remote. Go find that item!
- 4) Once you find the item, wipe that piece of bread, a slice of potato, or your cooked noodles all over the item. Make sure any teeny, tiny bacteria on that item transfer to the bread.
- 5) Place the piece of bread, potato or noodles into the sandwich baggie and seal it up. This is called a "sample."
- 6) Label the baggie with the name of the surface you touched, and get an adults help if you need it.
- 7) If you have another piece of bread, slide of potato or more cooked noodles, think of another surface in your house that you and your family are always touching! Repeat Steps 4-6 as many times as you want.
- 8) Once you've sample all the surfaces you want, place your labeled samples together so they can sit overnight. Put up your "Experiment in Progress" sign so no one tries to eat your samples!
- 9) Check your samples in 24 hours to see if and how they're starting to look different. That is bacteria growing!
- 10) Check again each day at the same time to see how the bacteria changes over a few days. The samples from areas with the most bacteria will start to show a lot more changes than the areas of your home with fewer bacteria.



Experiment Overview

24-Hour Science Experiment





Ages 5-9

Supplies:
Safety scissors
Gluestick

Instructions:

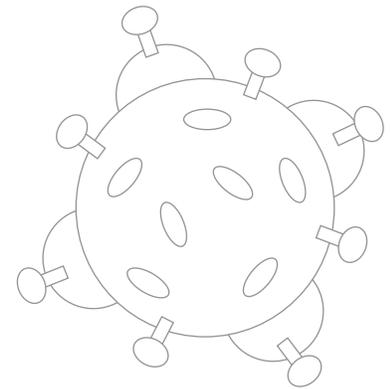
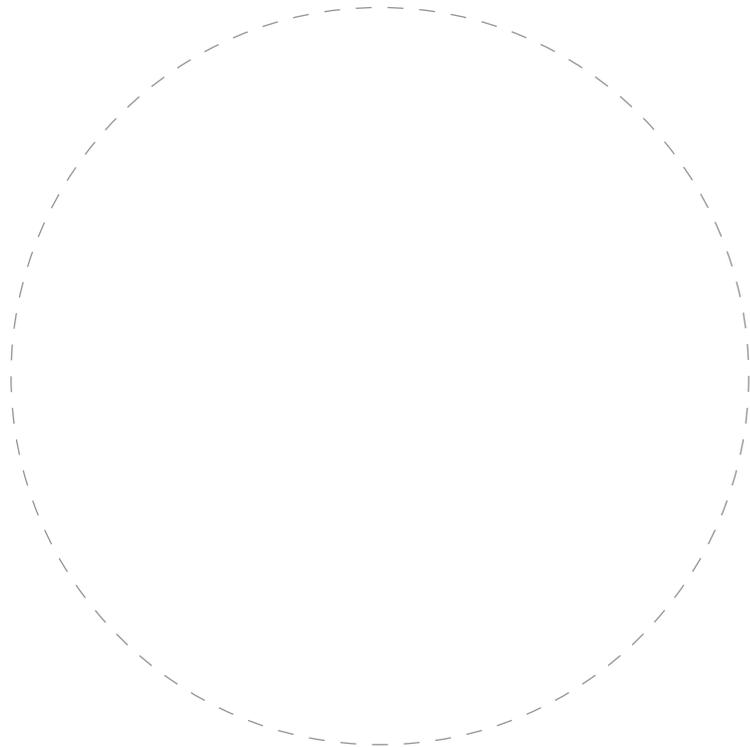
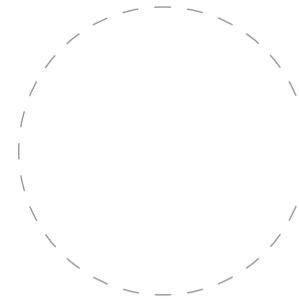
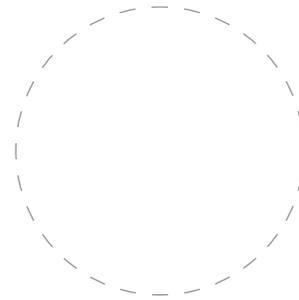
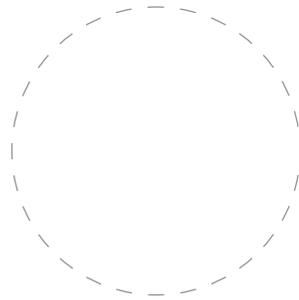
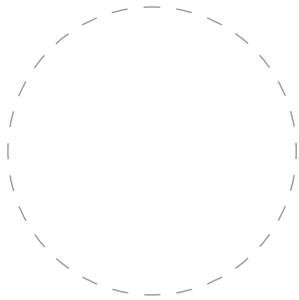
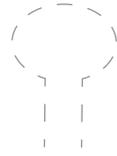
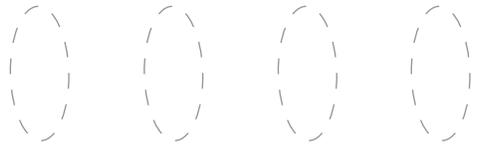
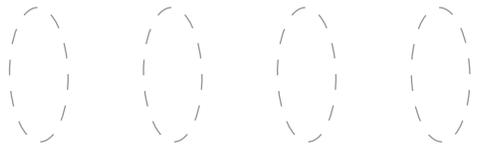
Print out the activity and with adult supervision, use scissors to cut out each piece, color and glue/tape together to match the bacteria located on the right hand side of the page! Take this activity even further by hiding the creatures around your home and using a paper towel roll or toilet paper roll as a microscope to locate the creatures!



Creature Crafts: Bacteria Cutout

24-Hour Science Experiment





Ages 5-9

Supplies:

Safety scissors

Gluestick

Instructions:

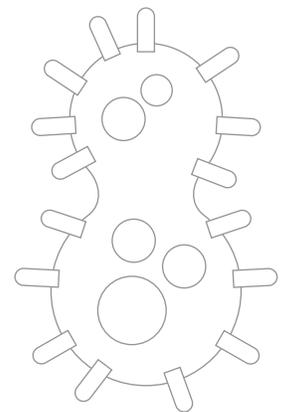
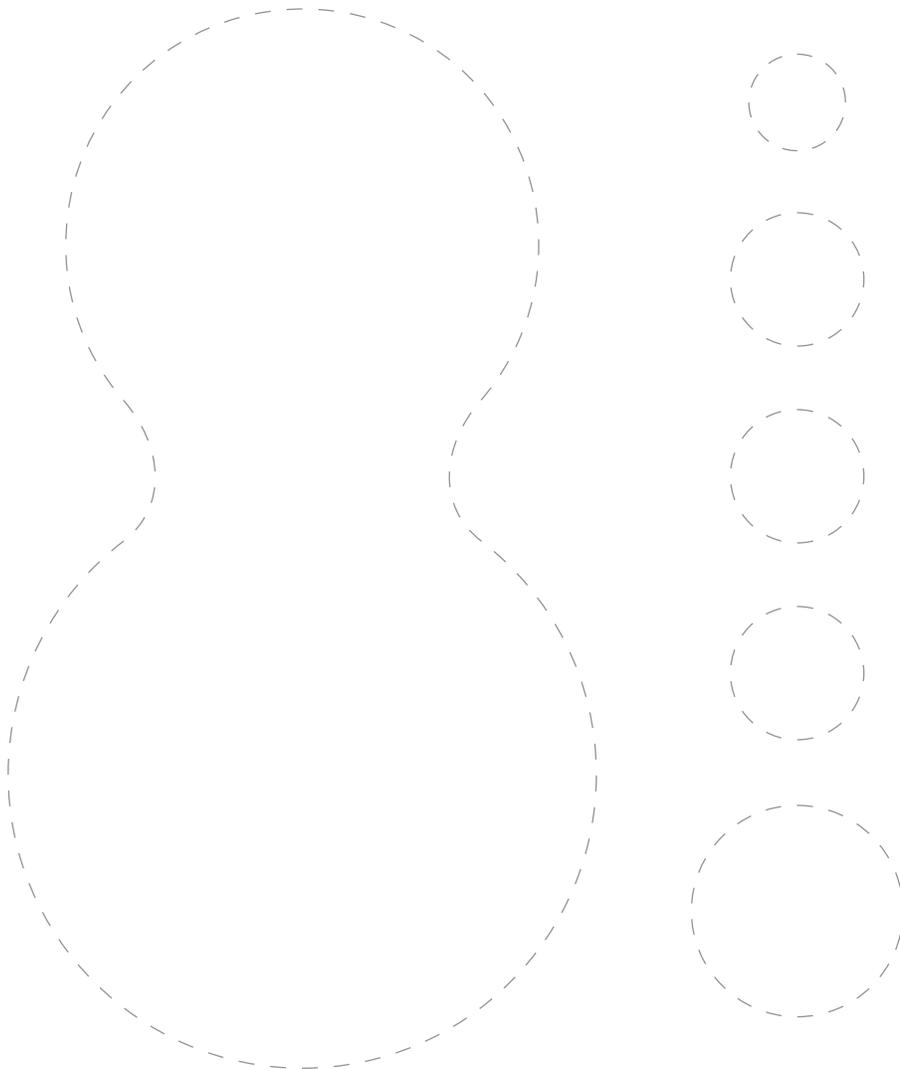
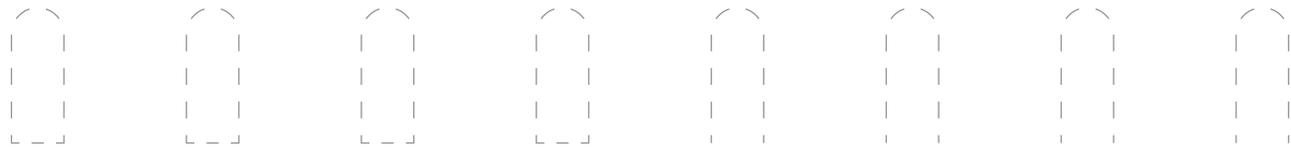
Print out the activity and with adult supervision, use scissors to cut out each piece, color and glue/tape together to match the fungus located on the right hand side of the page! Take this activity even further by hiding the creatures around your home and using a paper towel roll or toilet paper roll as a microscope to locate the creatures!



Creature Crafts: Fungus Cutout

24-Hour Science Experiment





Ages 5-9

Supplies:
Safety scissors
Gluestick

Instructions:

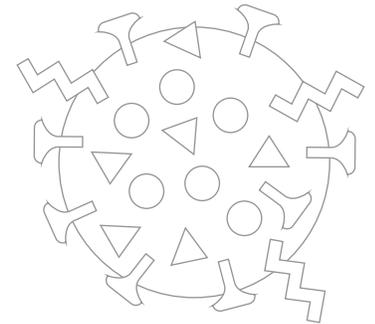
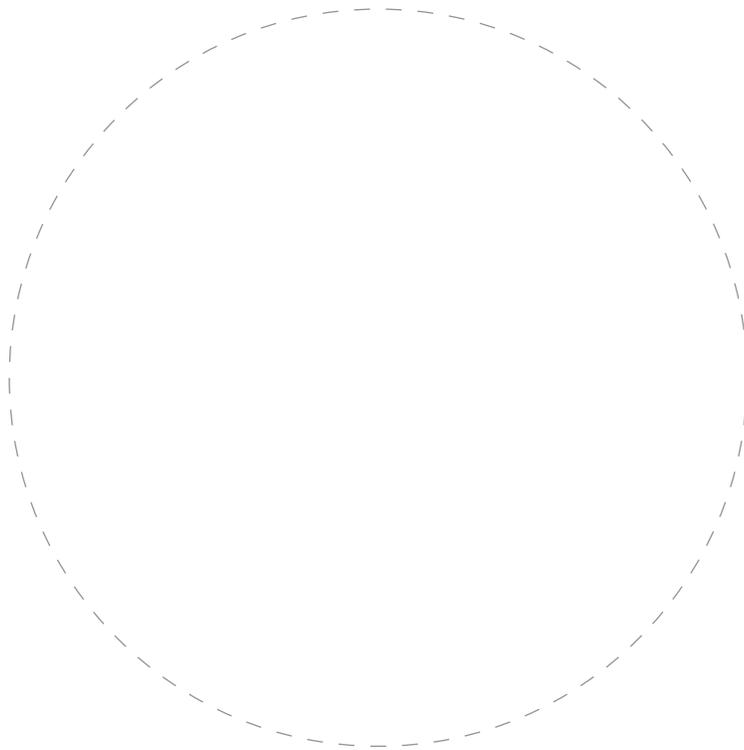
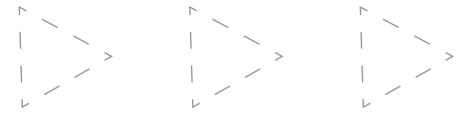
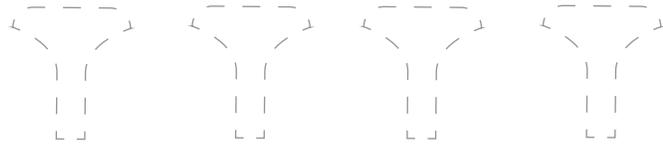
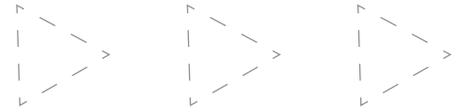
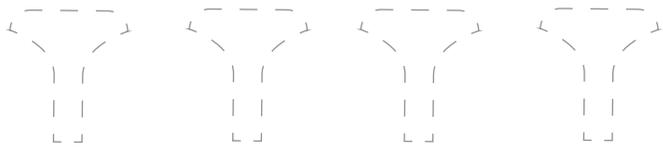
Print out the activity and with adult supervision, use scissors to cut out each piece, color and glue/tape together to match the protozoa located on the right hand side of the page! Take this activity even further by hiding the creatures around your home and using a paper towel roll or toilet paper roll as a microscope to locate the creatures!



Creature Crafts: Protozoa Cutout

24-Hour Science Experiment





Ages 5-9

Supplies:
Safety scissors
Gluestick

Instructions:

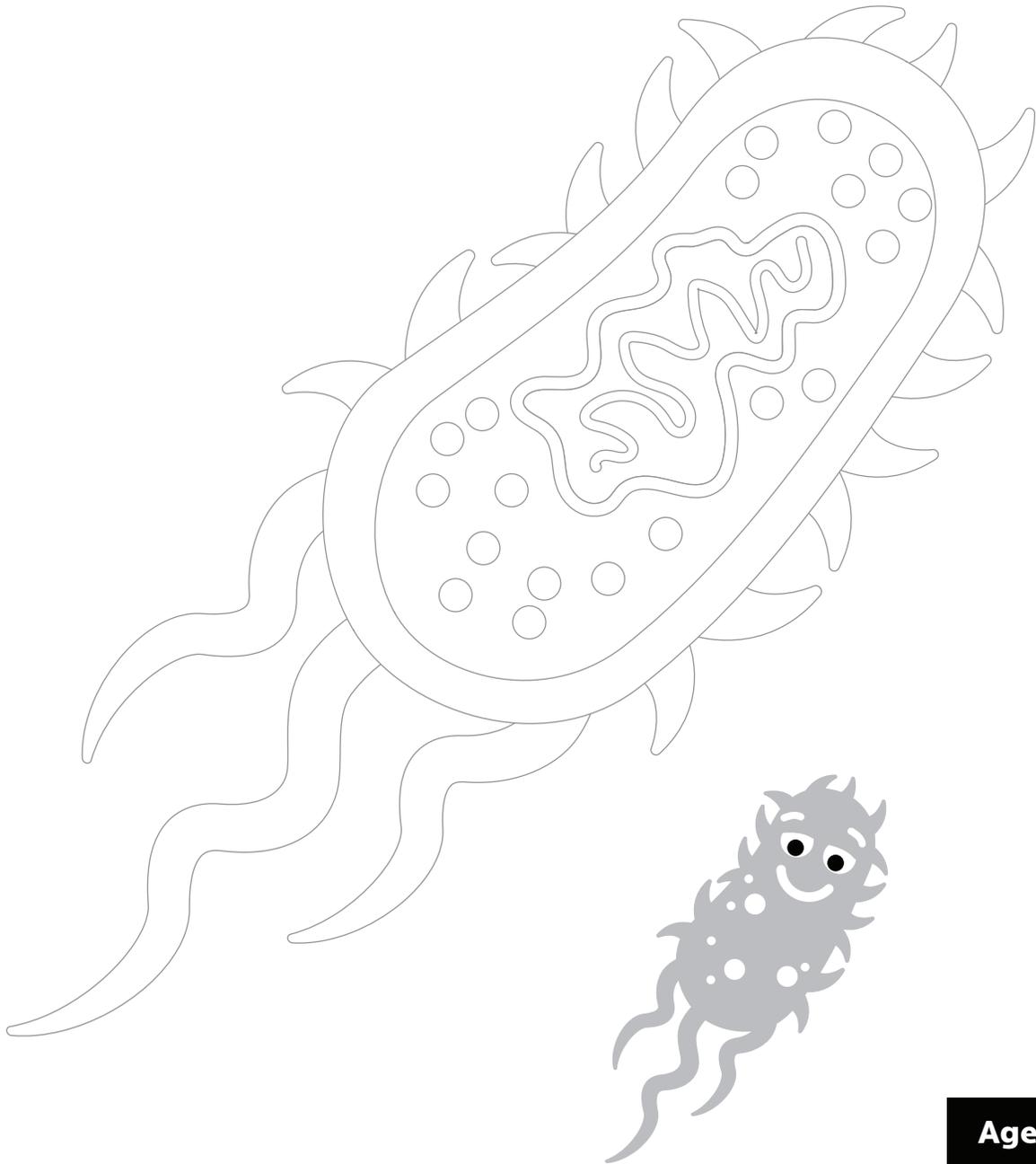
Print out the activity and with adult supervision, use scissors to cut out each piece, color and glue/tape together to match the virus located on the right hand side of the page! Take this activity even further by hiding the creatures around your home and using a paper towel roll or toilet paper roll as a microscope to locate the creatures!



Creature Crafts: Virus Cutout

24-Hour Science Experiment





Ages 5-9

Supplies:

Safety scissors

Coloring utensil

Instructions:

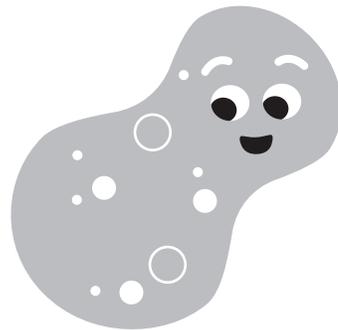
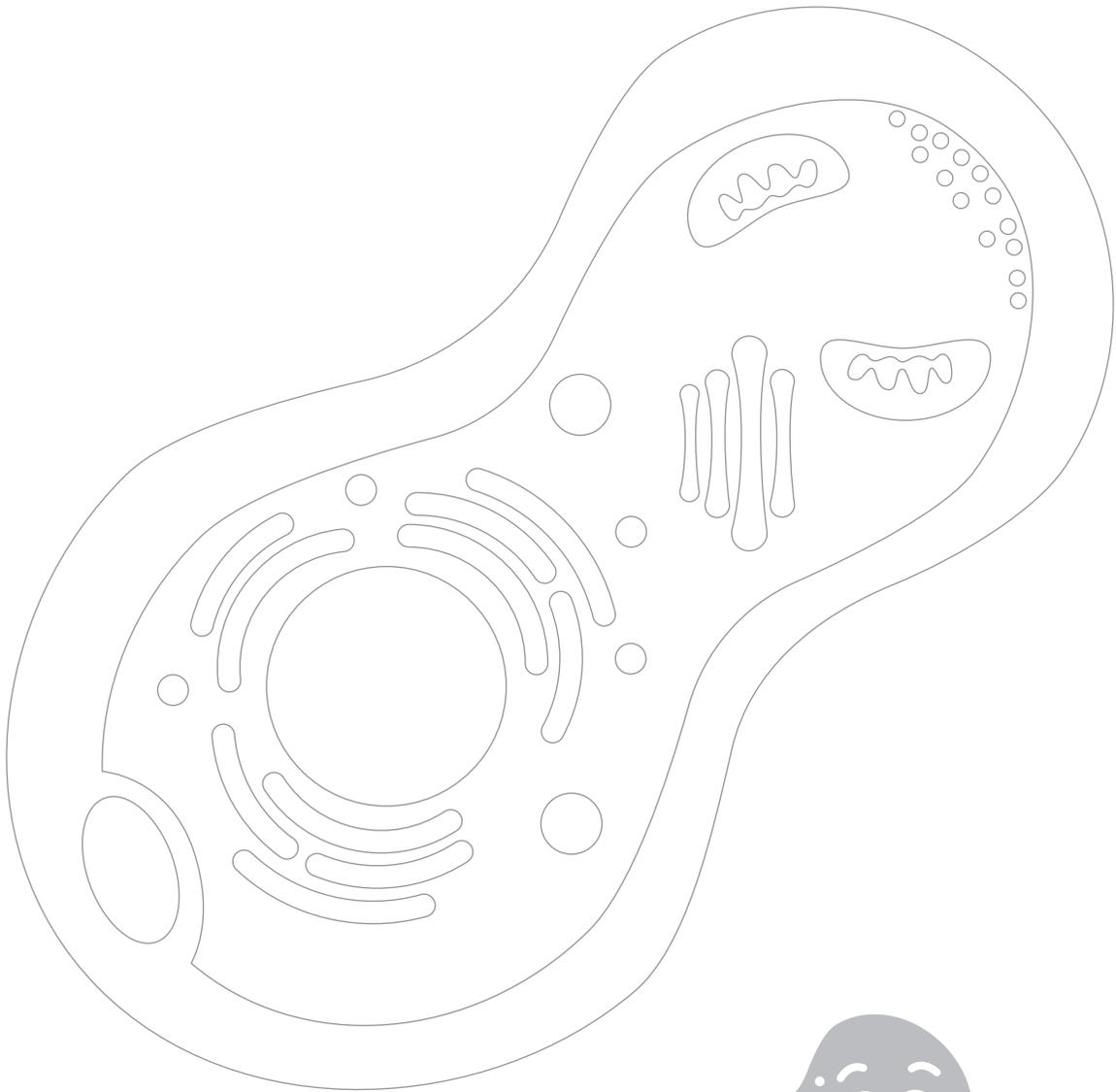
Print out the activity and use coloring utensils (markers, pencils, crayons) to color in the bacteria to match the one located on the right side of the page! Once complete, with adult supervision, use scissors to cut out the bacteria!



Coloring Guide: Bacteria

24-Hour Science Experiment





Ages 5-9

Supplies:

Safety scissors

Coloring utensil

Instructions:

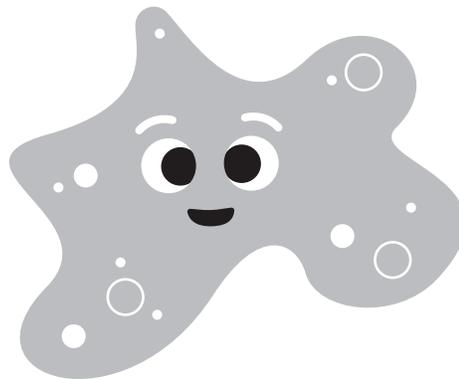
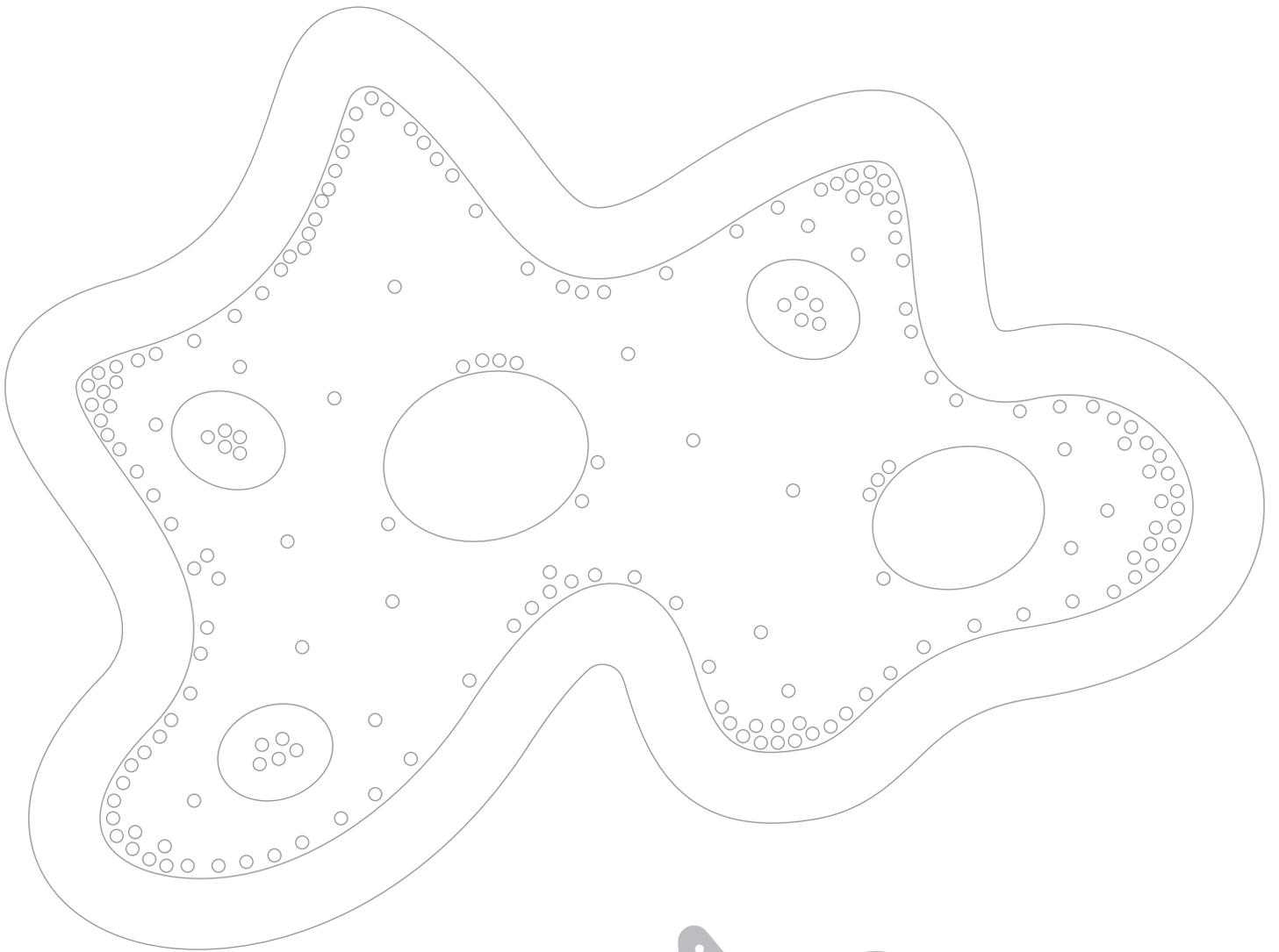
Print out the activity and use coloring utensils (markers, pencils, crayons) to color in the fungus to match the one located on the right side of the page! Once complete, with adult supervision, use scissors to cut out the fungus!



Coloring Guide: Fungus

24-Hour Science Experiment





Ages 5-9

Supplies:

Safety scissors

Coloring utensil

Instructions:

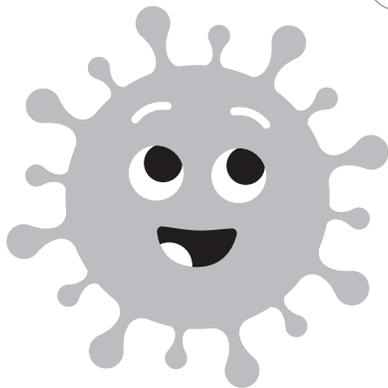
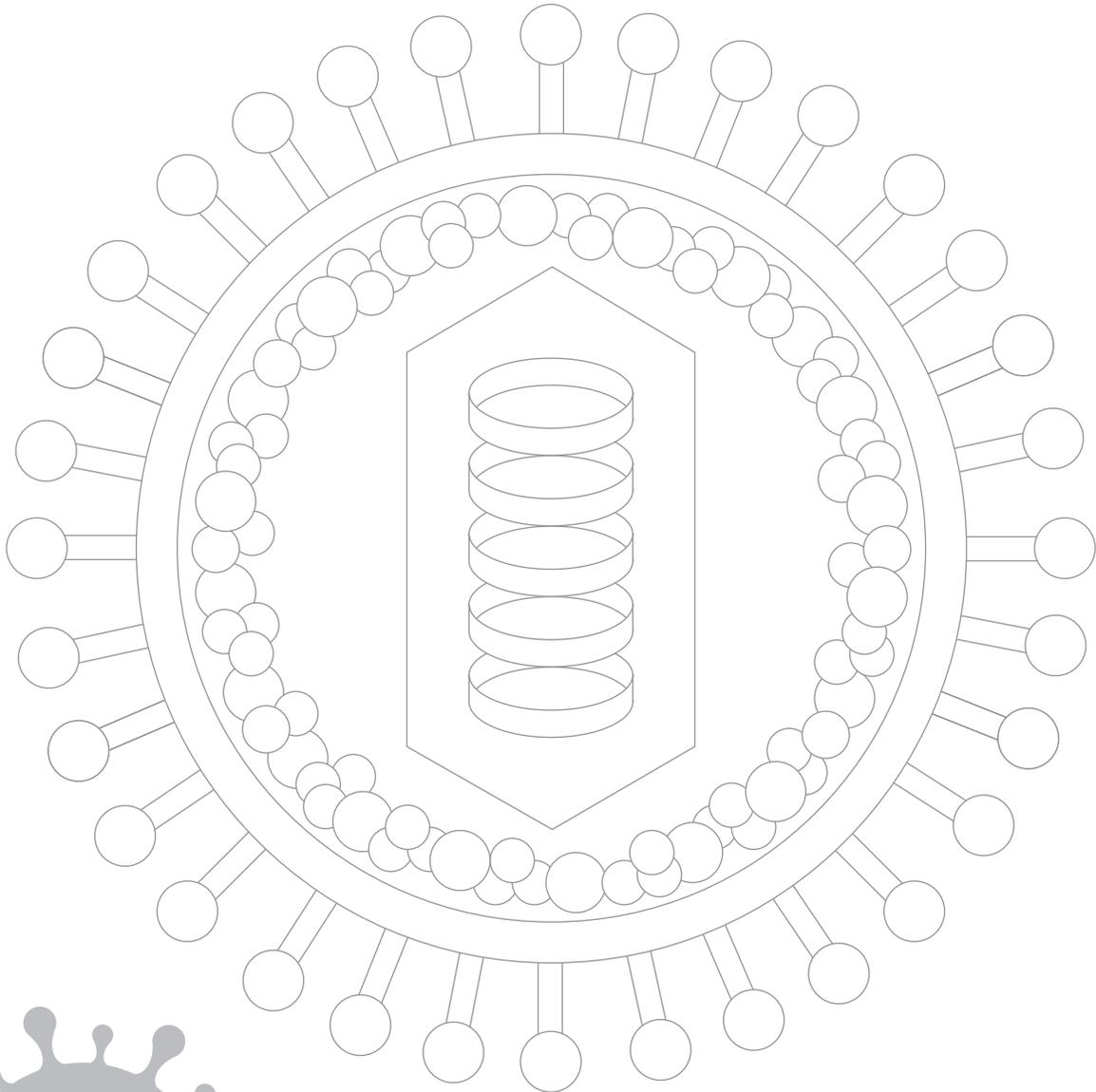
Print out the activity and use coloring utensils (markers, pencils, crayons) to color in the protozoa to match the one located on the right side of the page! Once complete, with adult supervision, use scissors to cut out the protozoa!



Coloring Guide: Protozoa

24-Hour Science Experiment





Ages 5-9

Supplies:

Safety scissors

Coloring utensil

Instructions:

Print out the activity and use coloring utensils (markers, pencils, crayons) to color in the virus to match the one located on the right side of the page! Once complete, with adult supervision, use scissors to cut out the virus!



Coloring Guide: Virus

24-Hour Science Experiment





EXPERIMENT IN PROGRESS

