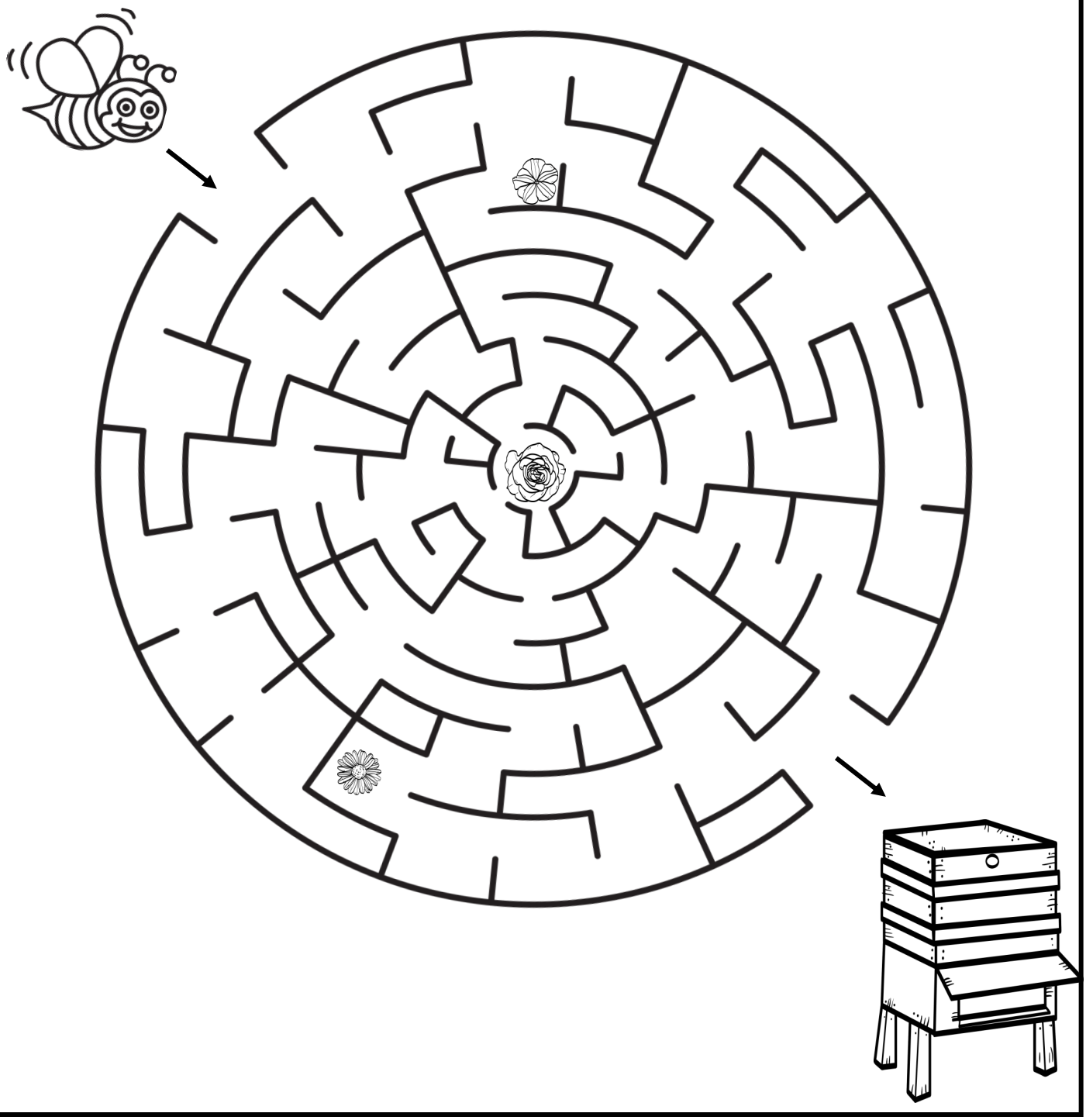
Help the Bee Collect Nectar for the Hive

Bees collect pollen and nectar from flower blossoms. Honey bees use the nectar for food. They also use it to make honey. They collect the nectar, store it, break it down, and carry it back to the hive. Sometimes they give the nectar to other bees; other times, they put the honey into empty cells in the hive. When the water evaporates from the nectar, it changes to honey. When the cells are filled with honey, the worker bees put a wax cap on the cell. Beekeepers collect honey from the combs, but leave some as food for the bees.

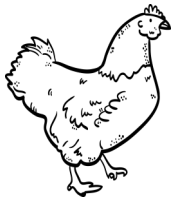
Help the bee below find each flower, stop to collect the nectar, and reach the hive.

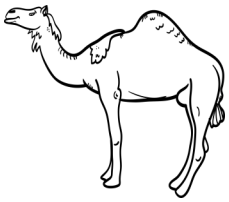


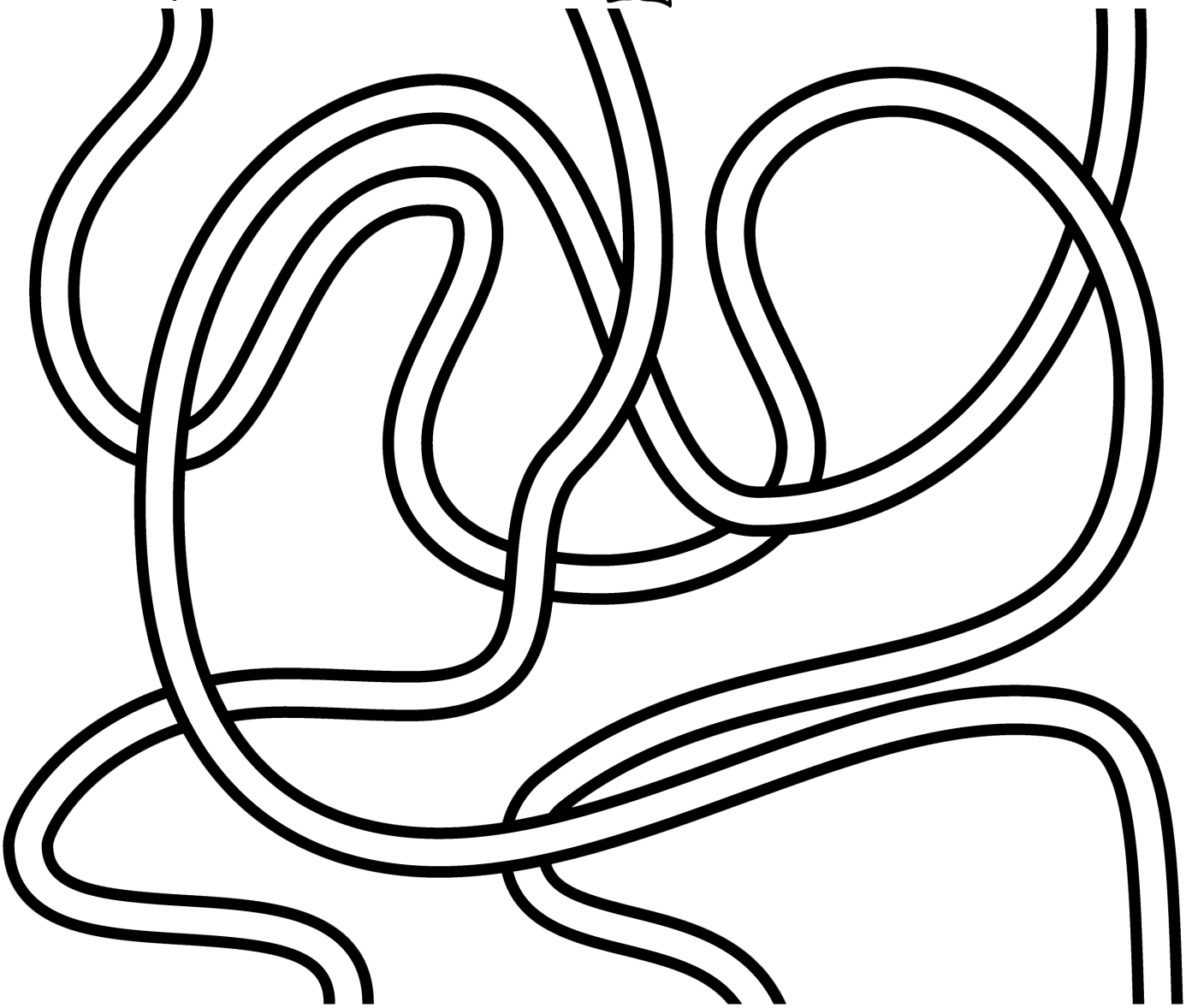
Habitats

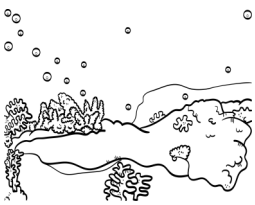
A habitat is a place that an animal usually lives. Every type of animal in the world has a place that is best designed for that animal to live and grow strong and healthy. Some animals need hot, dry deserts. Others need an ocean full of water. Your home is even a habitat for your pets.

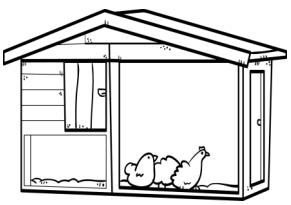
Help each animal find its habitat in the activity below.

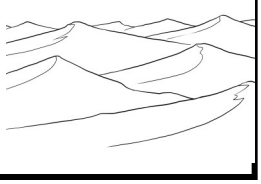








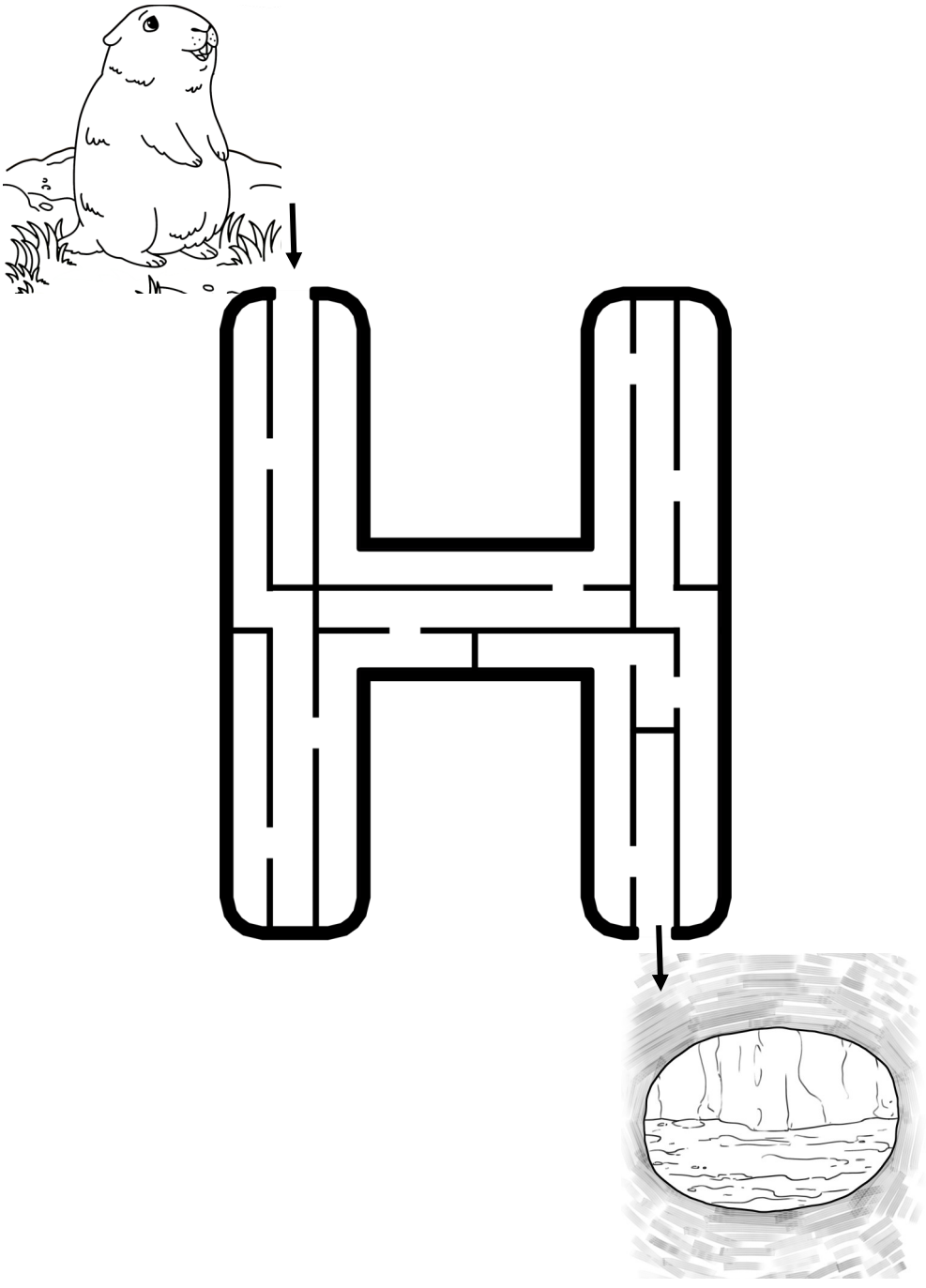




Help the Groundhog Find Its Burrow to Hibernate

A groundhog is an animal that hibernates. Hibernation is a special way some animals lower their body temperature and slow their heartbeat and breathing to use less energy. It helps them stay alive during times like winter when it's harder to find food. Groundhogs live in Canada and parts of the United States. They like to dig burrows to live in and make mazes with different rooms and many ways to get in and out. When it is time to hibernate, there is one special room with only one way in and one way out that they use.

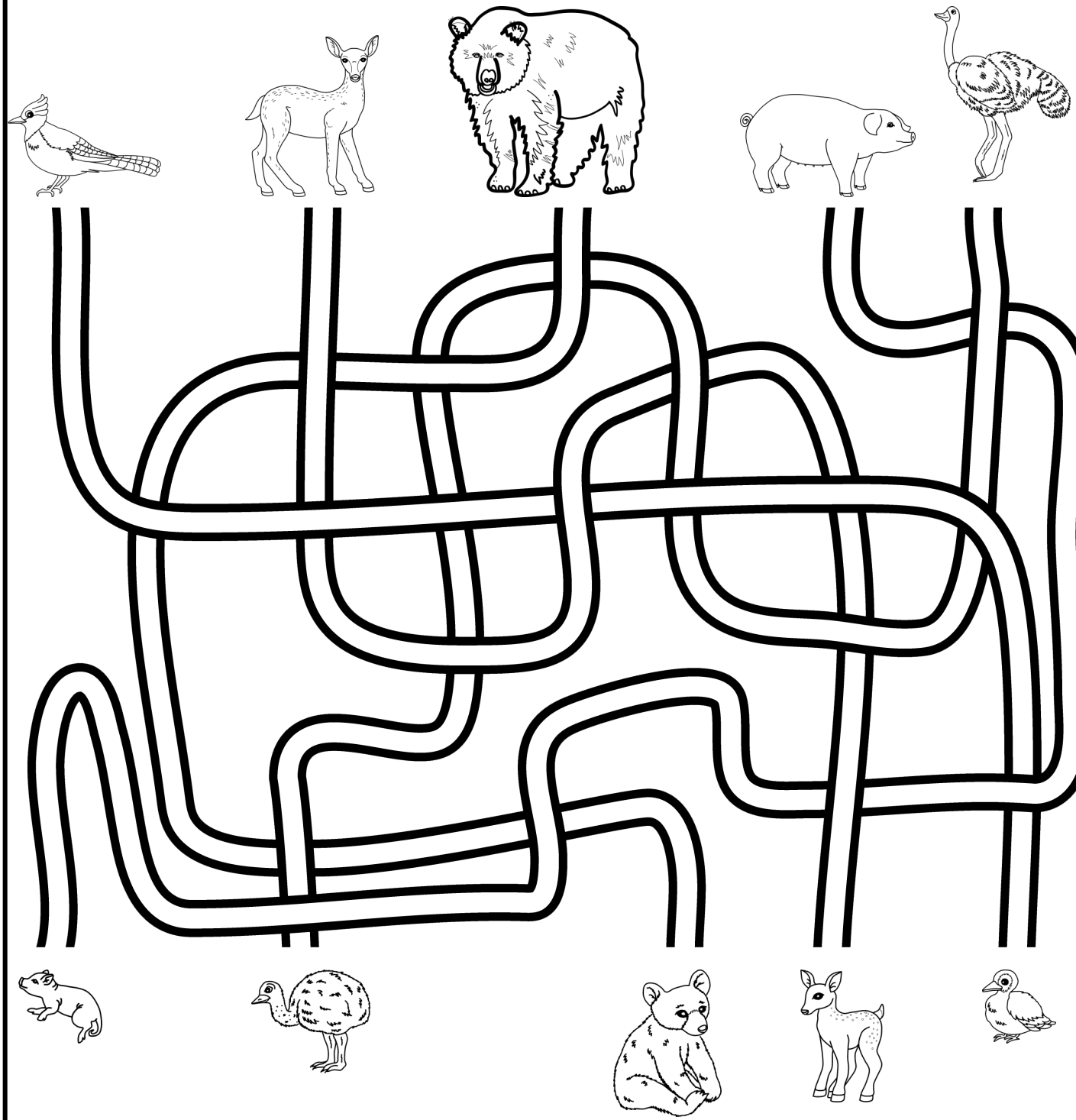
The groundhog below has to find its burrow soon because it is getting very cold out. It has been eating a lot and is ready to live off the fat it has stored. Help it find its way to the burrow by going through the maze of the letter "H" for hibernate and find the special room it has gotten ready.



Help the Animal Find Its Baby

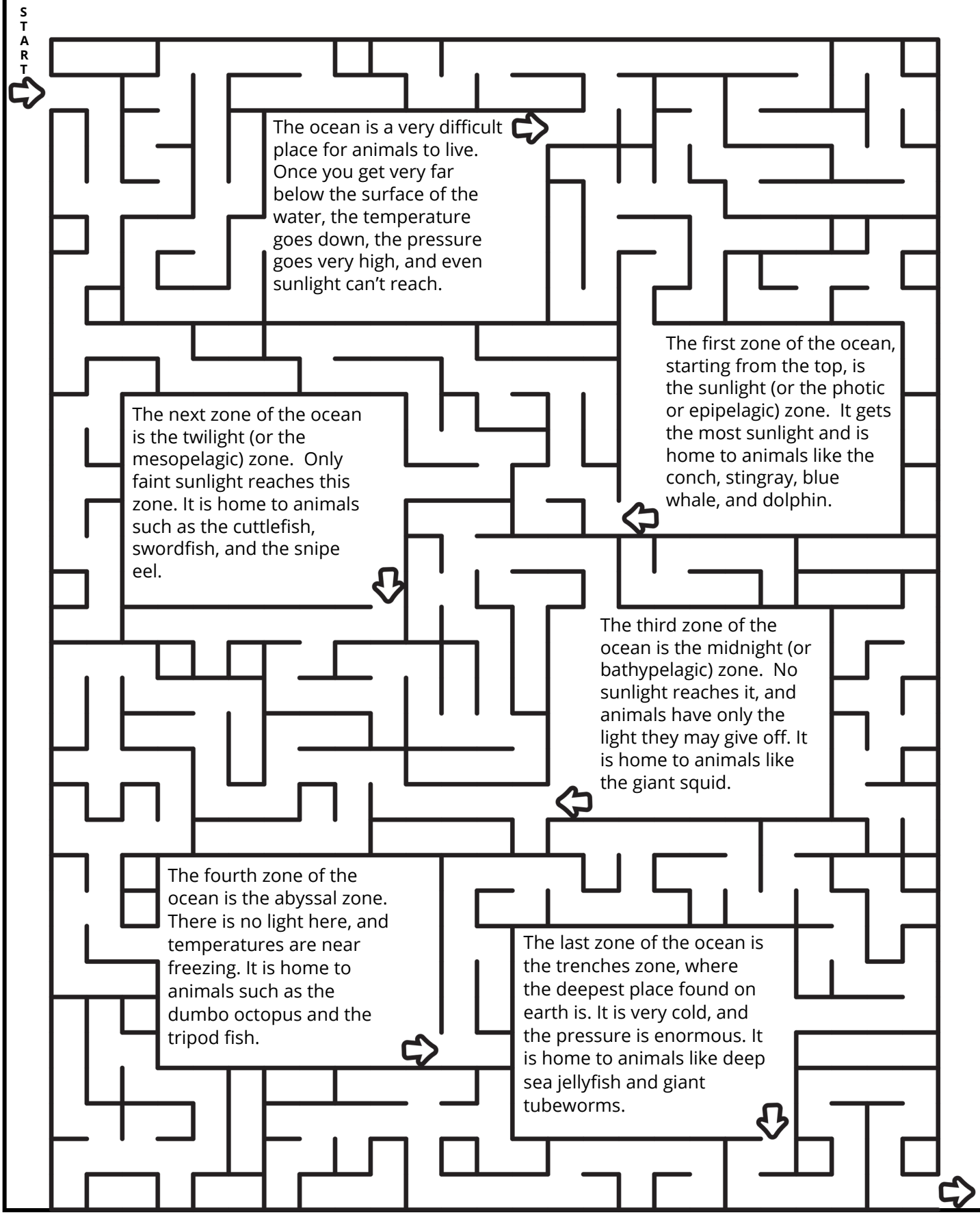
Animals have many different names for their babies. Just like human babies, animal babies have a lot of growing to do to be like their parents.

Look at the animals below. You can see the blue jay, deer, black bear, pig, and ostrich. Each one needs to find their babies. Follow the correct path to help the blue jay find its chick, the deer find its fawn, the black bear find its cub, the pig find its piglet, and the ostrich find its chick.



Ocean Zones

Start at the arrow to enter the maze and find out about the zones of the ocean.

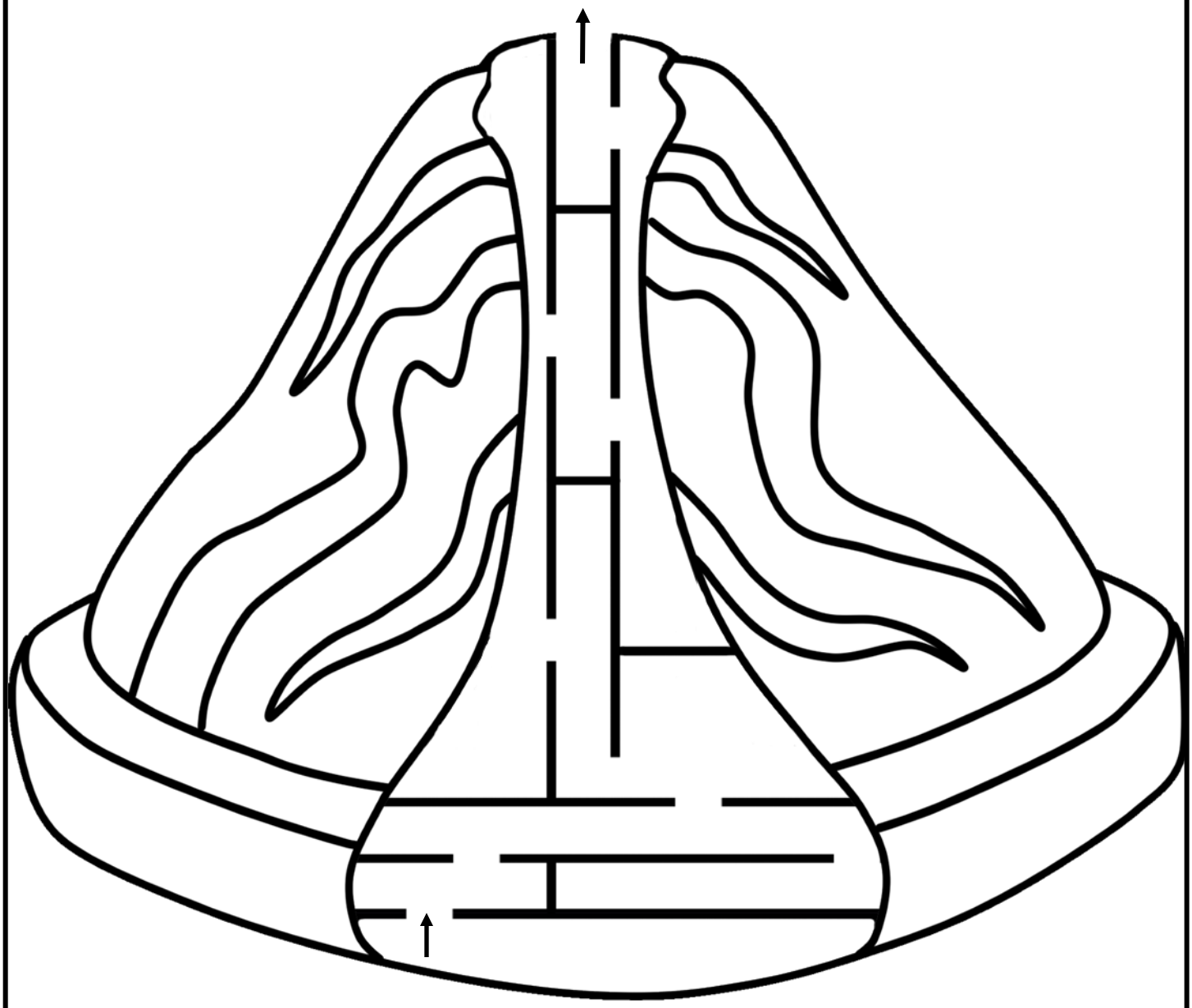


Magma Through a Volcano

A volcano is an opening in the Earth's crust at the top of, or sometimes on the sides of, a mountain or hill. Volcanoes are known for their eruptions of lava, ash, rocks, and gases. They can be various shapes and sizes.

As the magma, which is molten rock under the ground, builds up inside the volcano, the pressure builds up. When the pressure reaches a certain point, the volcano erupts. Sometimes, volcanoes erupt very calmly. There is usually not as much gas or water mixed into the magma, and the eruption is very calm with lava quietly flowing down the sides of the volcano. At other times, especially if there is a large buildup of gas or water in the volcano, the magma erupts violently and shoots gas and ash up into the air.

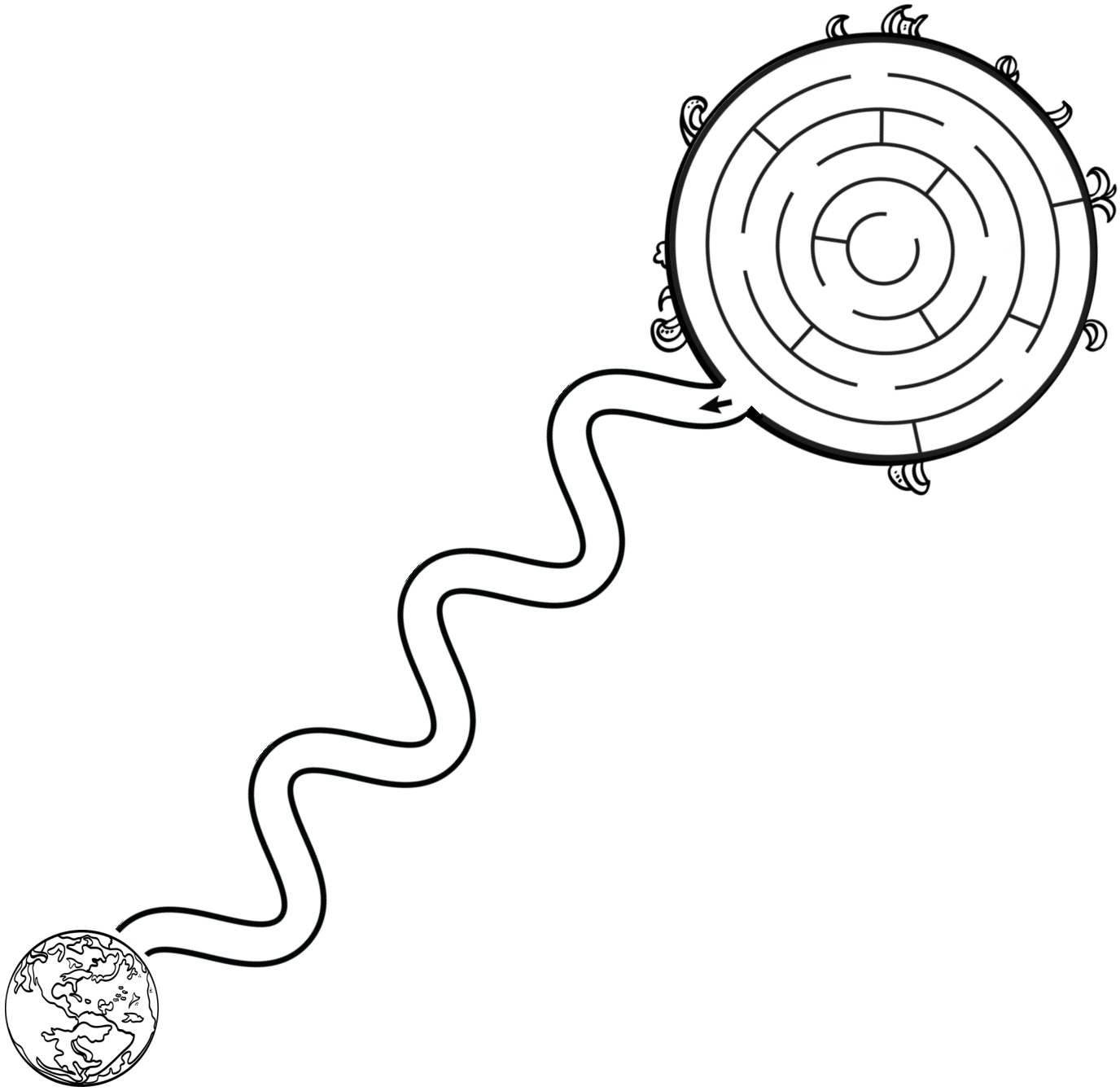
In the volcano below, help the magma find its way out of the volcano.



Heat From the Sun

The outer layers of the sun are very hot. The part of the sun we can see from Earth has a temperature of about 10,000 °F (5,500 °C). Imagine how hot it feels if it gets to be 100 °F (37.8 °C) where you live. Now think of it being 100 times hotter! But, when you realize the sun is approximately 92,960,000 miles (149,600,000 kilometers) away from Earth, you can see that it has to be that hot when it leaves the sun's surface to give enough heat to the earth to support life.

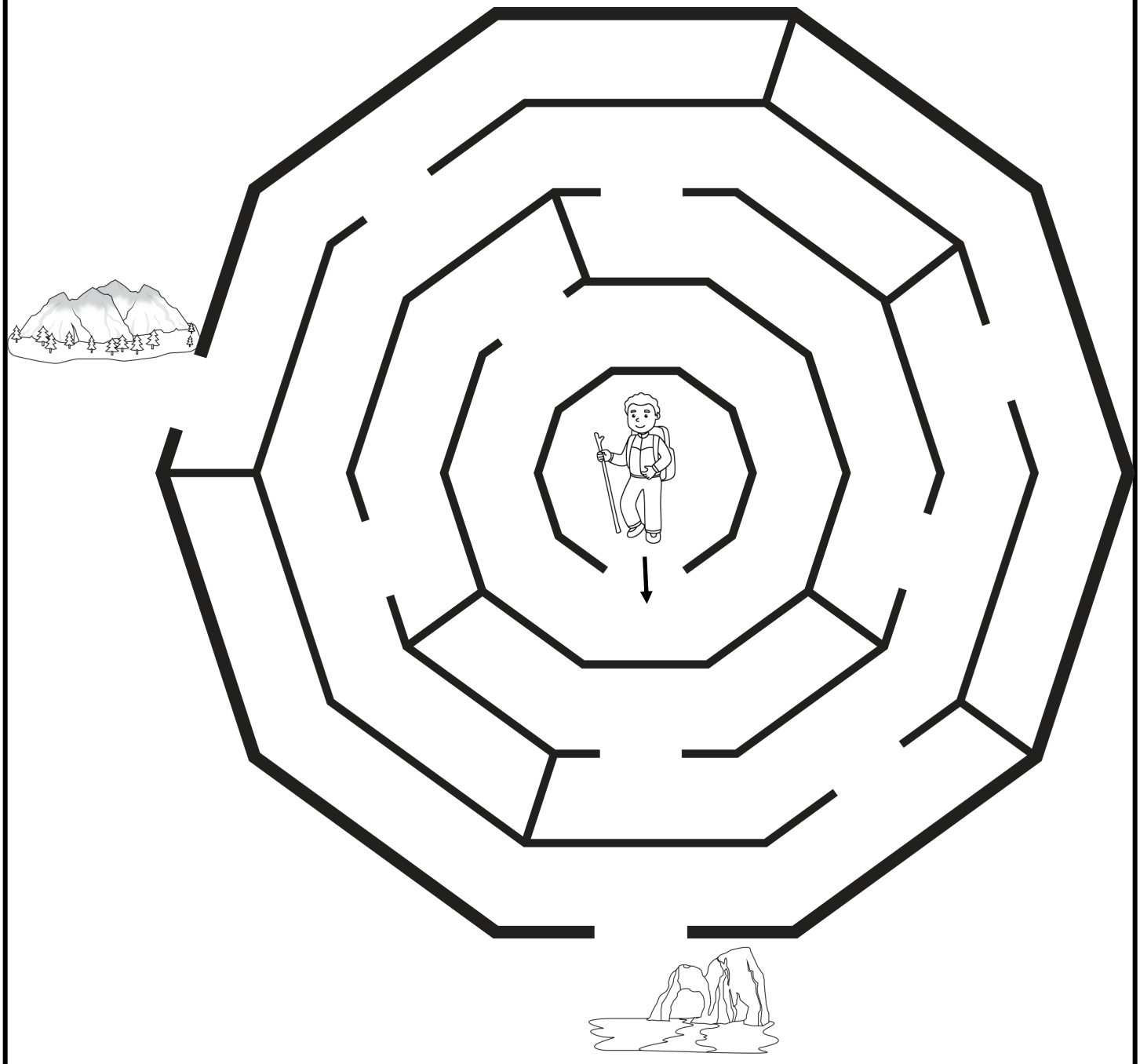
In the maze below, help the heat leave the sun and find its way to the earth. Start in the center of the sun.



Rock Arches

A landform is anything distinctive about the surface of a planet, moon, or asteroid that happens naturally. It is not something manmade but something that happens as a result of nature, such as erosion, earthquakes, floods, volcanic eruptions, the movement of glaciers, the action of rivers, etc. There are many different types of landforms. For example, consider the rock arch. A rock arch is something that happens when part of a rock is missing and a large opening is left in the rock. It looks like a doorway to walk through, except the top is curved. Sometimes, people build arches to honor people or events. These arches are not landforms. Only arches that are formed naturally are landforms.

In the maze below, help the hiker find the rock arch.



Changing From a Liquid to a Gas

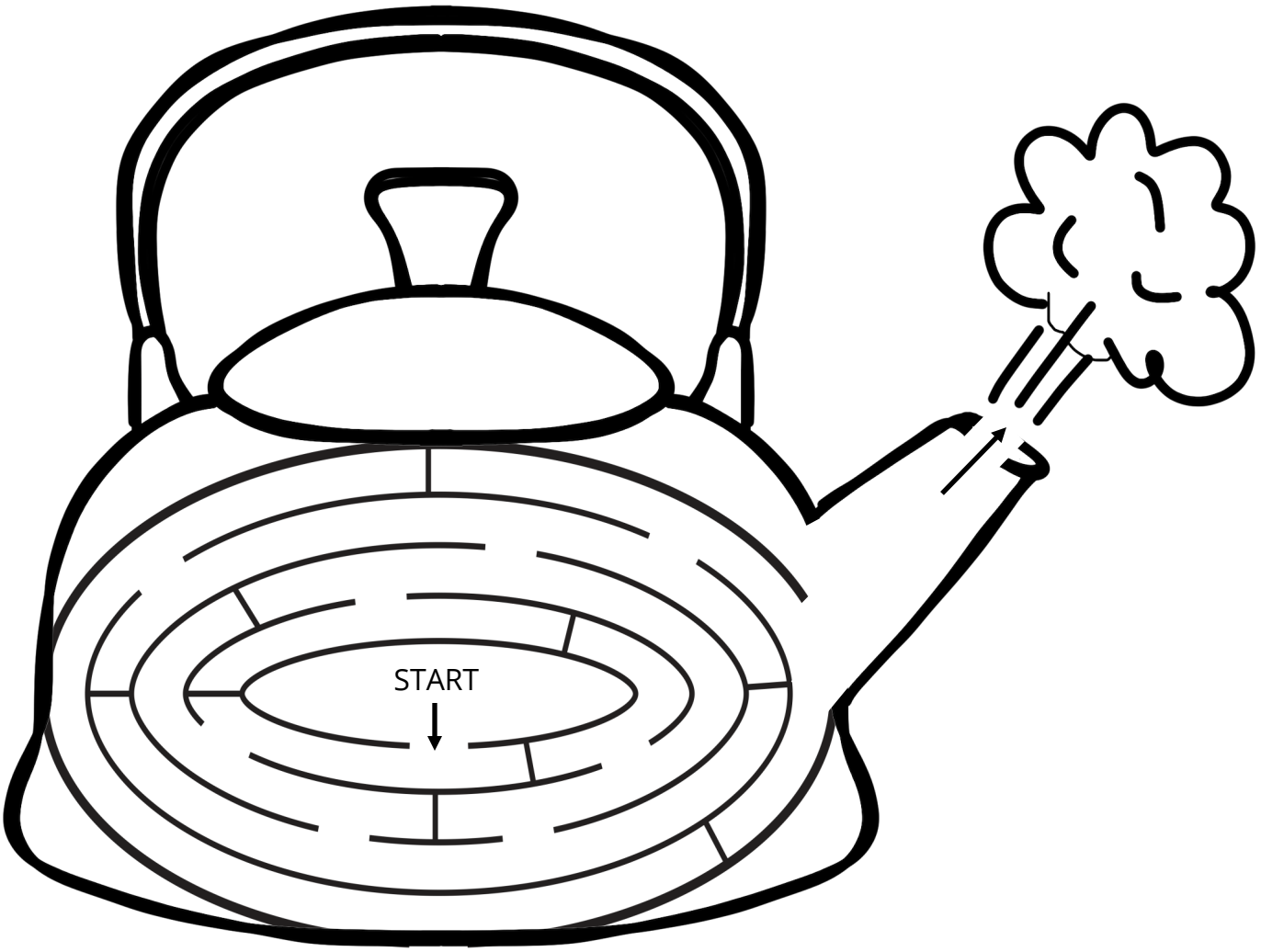
Matter is made of tiny particles that are too small to see without a microscope. Everything in the world is made of matter. The three states of matter we usually talk about are solids, liquids, and gasses.

In a liquid, the particles are packed tightly but they can move past each other. That gives liquids the ability to change their shape to fit the container they are in. If you pour water from a jug into a big bowl, the amount of water will not change, but the shape of the water will change.

We can't really see a gas, but an example is the air all around us. The particles in a gas are free to move around wherever they can. Gas doesn't have a shape, and it can take up any amount of space. It can fill a house or get packed into a balloon.

Sometimes, matter changes from a liquid to a gas when you heat it. This is what happens when you boil water. It turns to steam.

Help the steam in the teapot below find its way out.

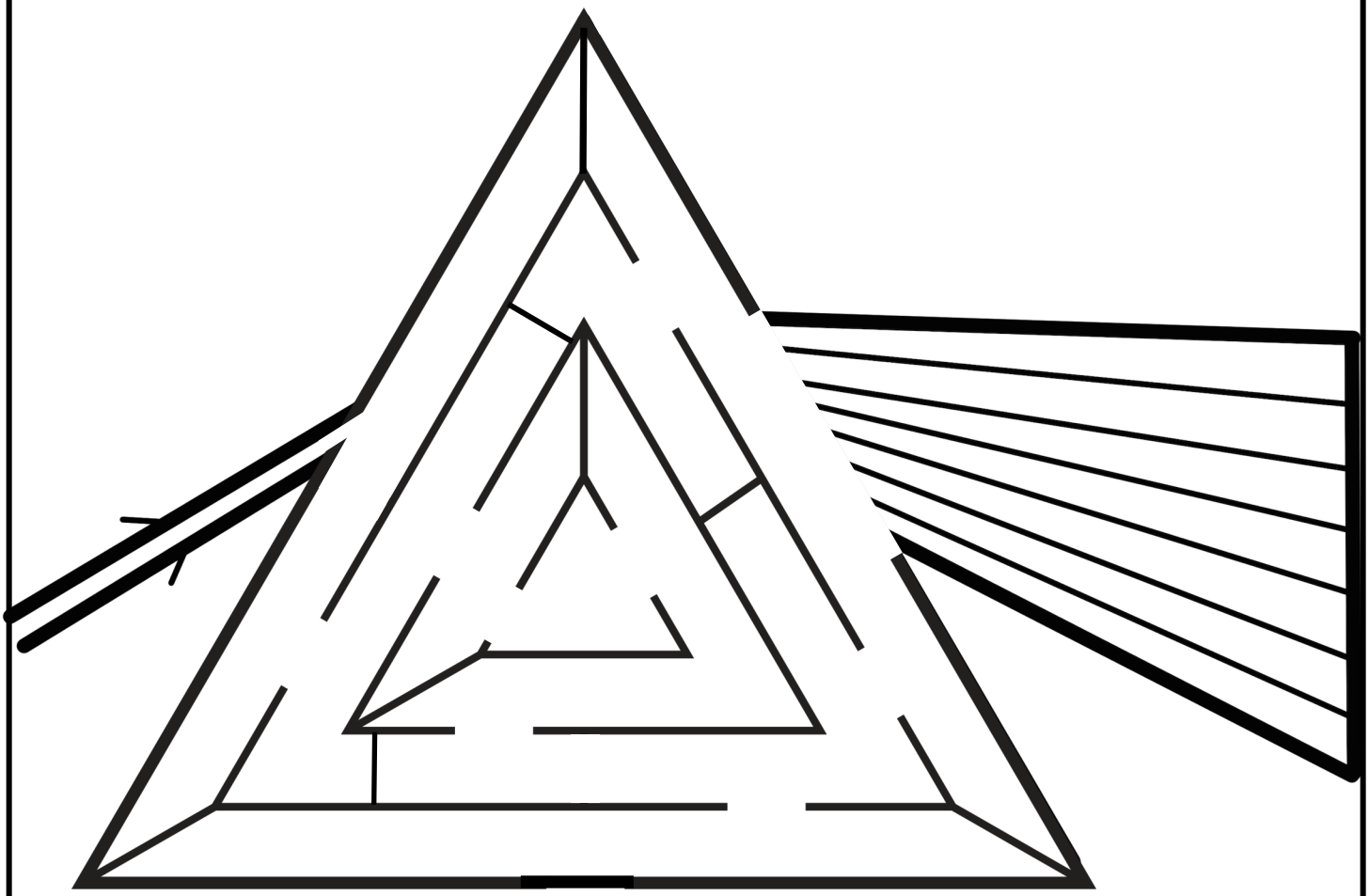


Light Through a Prism

Light travels through air, water, and space. When we see light, it usually looks white, but it's actually made of light with different wavelengths, some long and some short. Each wavelength is a different color. Light moves in a straight line until something stops it. When an object stops light, it absorbs some of the light and bounces some of it back. The color that is bounced back allows us to see colors. For example, when we see green leaves on a tree, it is because the leaves absorb all of the colors except green, which they bounce back. That is why the leaves look green.

Light is made of both waves and particles. We can learn about these waves when we study light as it goes through something called a prism. When we shine light through a prism, the prism breaks it down into its different wavelengths, or colors.

Light traveling through a prism doesn't actually go through it like a maze, but just for fun, use the maze below to help the light get through the prism and come out the other side in all the colors of the rainbow!

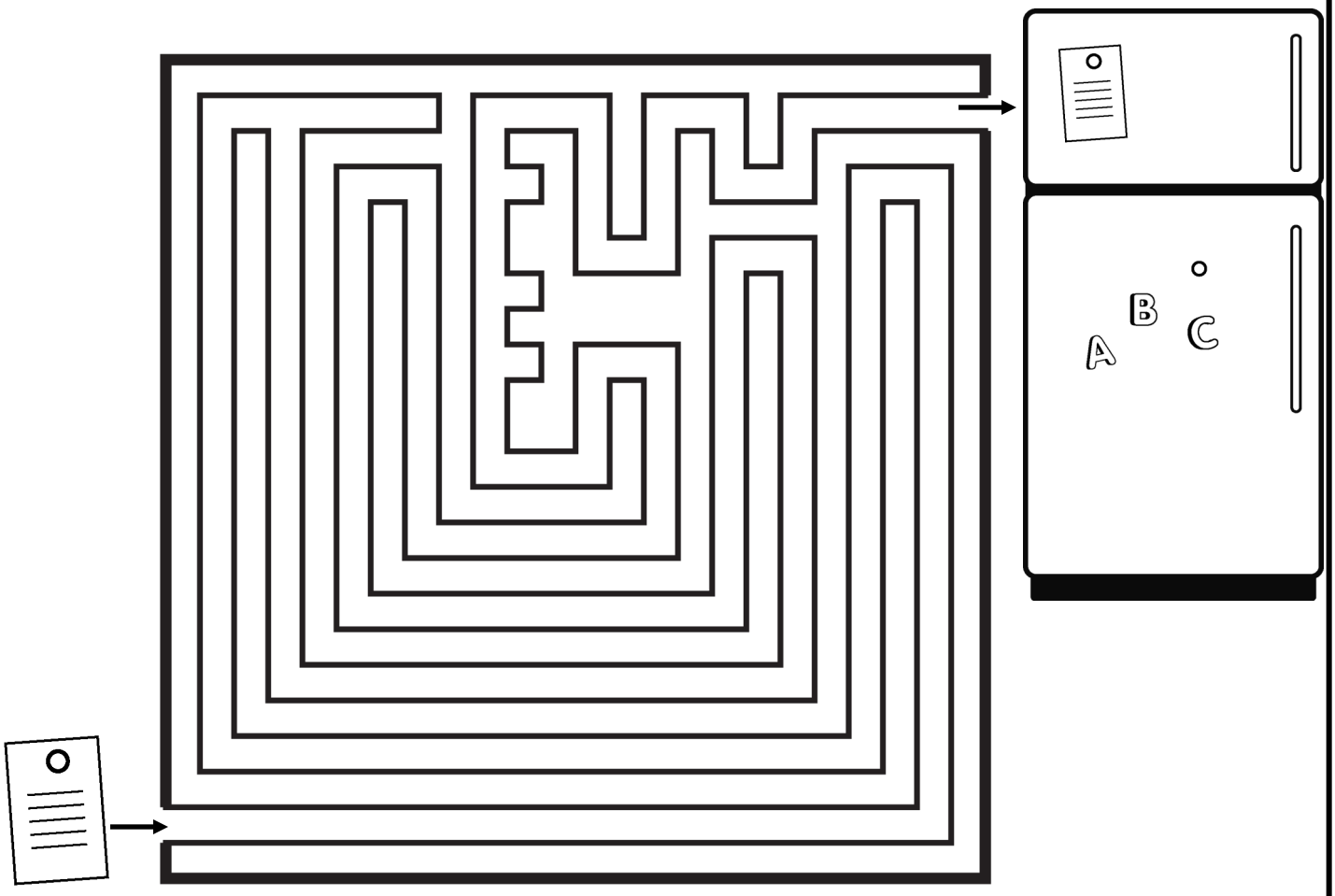


Magnets

Magnets have a very special ability to pull on certain kinds of metals. This is called magnetism. Magnets and magnetism are very useful. Magnets are often used to run electric motors. They are also used in many appliances to allow them to work. Magnetic strips on credit cards hold the information needed to allow you to use them.

Magnets come in many sizes and shapes. Sometimes larger magnets are used for very big jobs such as in scrap yards where large pieces of metal must be moved. Smaller magnets are used everyday in homes for things such as latches on cupboard doors and to hold notes and other things to metal surfaces such as refrigerators.

Help the magnet and note below find their way to the refrigerator so the family can remember some of the things they need to do today!



Electricity

Electricity is a type of energy. To understand electricity, you have to understand a little about atoms. Atoms are too small to see without a very powerful microscope. Everything in the world is made of atoms. But, even though atoms are so very small, they are still made of other parts. One of those parts are electrons. Electrons surround the center of an atom and usually stay close to their atoms. Sometimes, though, they move from one atom to another, then to the next atom, and so on. When electrons move this way, it is called an electric current. Some materials allow electrons to move more easily from one atom to the next. Other materials do not allow the electrons to move very easily. For example, a copper wire allows electrons to move freely. Rubber does not allow them to move freely. So, if there is a piece of copper wire, it will often be surrounded by rubber so the electrons have to move through the wire and cannot jump off and shock or hurt someone.

To direct the movement of electrons, called an electric current, a circuit is needed. The parts of an electric circuit are a source of energy, something to send the electricity to, and wires to connect them.

Look at the picture below. Trace the path of the electric current through the battery so it can keep the light on.