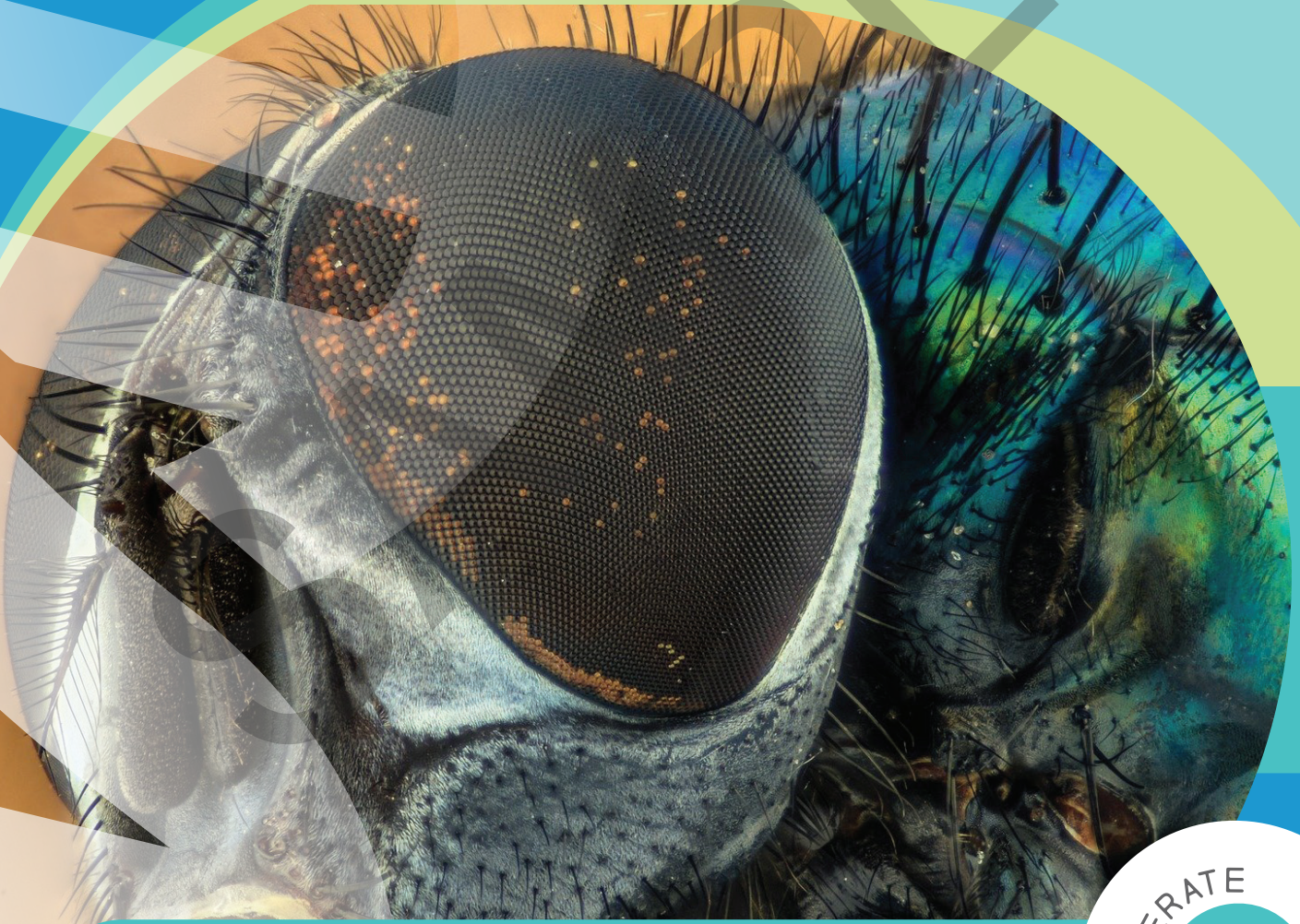


EYE SPY



STUDENT WORKBOOK

ACCELERATE



PARTS OF AN EYE

Each of the eyes in Activity 1 had similarities and differences. How do eyes work, and why are they so important to the organisms?

LEARNING GOALS:



I can analyze data to provide evidence that organisms inherit traits and groups have variations of traits.

2

EYE SEE YOU

What better way to understand animal eyes than with an eye dissection? You will dissect a sheep eye to study its structure and function. **Structure** is the way the parts of an organism are arranged or set up. A **function** is a purpose for something or the job something does. After your eye dissection, you will fill out a chart indicating the function of each structure of the eye.

WHAT YOU NEED:

FROM THE KIT:

- Dissecting tray
- Forceps
- Gloves
- Scalpel
- Sheep eye specimen



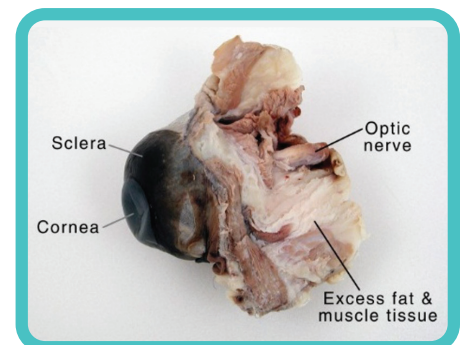
WARNING! Contains chemicals that may be harmful if misused. Do not eat or drink. Wash your hands after use.
WARNING! Sharp objects can cause injury. Don't cut or poke yourself.

WHAT TO DO:

1. Put on your gloves.
2. Rinse the sheep eye to remove any remaining preservative fluid.

External Anatomy

3. Looking at the eye, the easiest part to identify is the cornea, which is a see-through layer that forms at the front of the eye.
4. On the back of the eye, find the large mass of white tissue. This lump of excess fat and muscle tissue is attached to the sclera, the outer layer of the eyeball.
5. You will also find the optic nerve on the backside of the eye. The optic nerve feels like a tough, flexible tube. It sends light signals detected by the rods and cones in the eye to the brain, which the brain processes as images.



MODEL EYES

The primary function of eyes is sight. What an eye looks like, including the structures within each organism's eye, is related to each organism's habitat and lifestyle.

In Activity 1, you looked at eyes of many organisms. In the last section, you learned about the eyes of several new organisms. In this section, you will be making the eye of an animal of your choice using modeling dough.

WHAT YOU NEED:

FROM THE KIT:

- 4 modeling doughs
- Masking tape
- Paper clips



WARNING! Contains chemicals that may be harmful if misused.
Do not eat or drink. Wash your hands after use.

WARNING! CHOKING HAZARD - Small parts. Not for children under 3 years.

WHAT TO DO:

STEP 1 Choose an animal to make a model eye of.

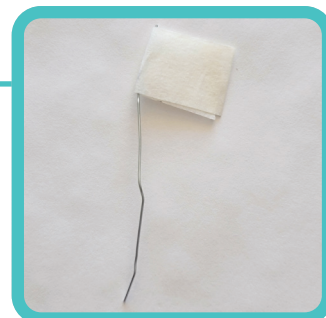
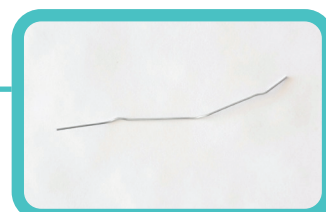
Note: It cannot be an animal already discussed in this kit.

Write your animal choice here: _____

STEP 2 Using four colors of modeling dough, make a model of the animal's eye.

STEP 3 Label each structure of your model eye.

- Unbend a paper clip. ●
- Write the name of the structure on a piece of masking tape.
- Wrap the piece of masking tape around one end of the unbend paper clip. ●
- Poke the other end of the unbent paper clip into the structure of the model eye.



Organisms are suited for their habitat because of the traits they have. Each species within an area has specific traits that help them to survive there.

Using images from magazines or the internet, create a new animal. Your animal can have any traits from other animals that you would like. With each trait you give your new animal, label what function it serves. For example, your new animal may have big eyes to see well at night when it hunts for food.

Your animal needs to have traits that give it the ability to do the following:

- Eat tall grasses
- See lots of colors
- Protect itself from predators

When you are finished making your animal, answer the Reflect questions. Then, share your animal with a partner, your teacher, or a family member.



REFLECT

1. What trait helps your organism to eat tall grasses? Explain.
2. What trait helps your organism to see lots of colors? Explain.
3. What trait helps your organism protect itself from predators? Explain.



SCIENCE UNLOCKED

© Home Science Tools. All rights reserved.
Reproduction for personal or classroom use only.

Contact us at: www.homesciencetools.com/customer-service/

A Product of Homesciencetools.com

Kit	SU-EYESPY
Instructions	IN-EYESPYS
Revision Date	4/2022