THROUGH THE EYES OF a FLY

LESSON

GRADE LEVEL

4

Skill

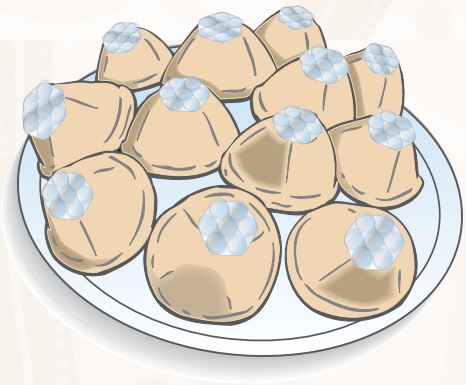
Discuss how compound eyes help flies survive. Create a model of an insect's compound eye.

Estimated Lesson Time

45 minutes

Teacher Preparation

Gather the supplies for the experiment.



MATERIALS NEEDED

for each group:

- ☐ **sanitized egg carton**
- ☐ **paper bowl**
- ☐ **sheet of bubble wrap**
- ☐ **glue**
- ☐ **tape**
- ☐ **scissors**

STUDENT MATERIALS NEEDED

- ☐ **1 science notebook**

For virtual learning scenarios, students/parents will need advance notice of required materials.

Presented by TERMINIX®

Next Generation Science Standard 4-LS1-1

THROUGH THE EYES OF a FLY

LESSON

1. **Ask** your students if they have ever wondered why it is difficult to catch a fly. Explain that besides being able to fly through the air at speeds over 50 mph, flies have unusual eyesight! Many insects have compound eyes that consist of thousands of six-sided lenses. These lenses don't provide clear vision, but they can detect the slightest movement. The large compound eyes allow the fly to see all around and even behind it. Ask:
   - How do compound eyes help a fly survive? Explain your answer. *(Compound eyes help a fly see small movements. A fly can protect itself from danger.)*
   - Compare the compound eyes of a fly to the eyes of a human. How are they the same? How are they different? *(A human eye has only one lens. A fly's eye has thousands of lenses. Human eyes provide clear vision. A fly's eyes do not.)*
2. **Divide.** Now that students have discussed the overall function of a compound eye, divide the class into groups of four to create their own compound eye models.
3. **Provide** each group with the materials listed.
4. **Instruct** each group to cut the egg carton into 12 individual cups. Then invert the paper bowl and tape or glue the egg cups to the bottom.
5. **Instruct** the group to cut the bubble wrap into 12 hexagons so it represents the lenses and glue one lens to the bottom of each cup.
6. **Ask.** Once each group has completed its compound eye model, ask each child to answer the following questions in his science notebook:
   - What have you learned about compound eyes?
   - How do compound eyes help insects survive?
   - What other body structures assist an insect with its survival?

For virtual learning scenarios, teachers may want to address each group in separate video chat sessions.