# Unit 3 Lesson 2: Exploring Circles

### 1 How Do You Figure? (Warm up)

#### Student Task Statement

Here are two figures.



Figure C looks more like Figure A than like Figure B. Sketch what Figure C might look like. Explain your reasoning.

# 2 Sorting Round Objects

#### Student Task Statement

Your teacher will give you some pictures of different objects.

1. How could you sort these pictures into two groups? Be prepared to share your reasoning.

- 2. Work with your partner to sort the pictures into the categories that your class has agreed on. Pause here so your teacher can review your work.
- 3. What are some characteristics that all **circles** have in common?
- 4. Put the circular objects in order from smallest to largest.
- 5. Select one of the pictures of a circular object. What are some ways you could measure the actual size of your circle?

# **3 Measuring Circles**

#### Student Task Statement

Priya, Han, and Mai each measured one of the circular objects from earlier.

- Priya says that the bike wheel is 24 inches.
- Han says that the yo-yo trick is 24 inches.
- Mai says that the glow necklace is 24 inches.
- 1. Do you think that all these circles are the same size?
- 2. What part of the circle did each person measure? Explain your reasoning.

#### **Activity Synthesis**



# 4 Drawing Circles (Optional)

### Student Task Statement

Draw and label each circle.

1. Circle A, with a **diameter** of 6 cm.

- 2. Circle B, with a **radius** of 5 cm. Pause here so your teacher can review your work.
- 3. Circle C, with a radius that is equal to Circle A's diameter.

- 4. Circle D, with a diameter that is equal to Circle B's radius.
- 5. Use a compass to recreate one of these designs.

