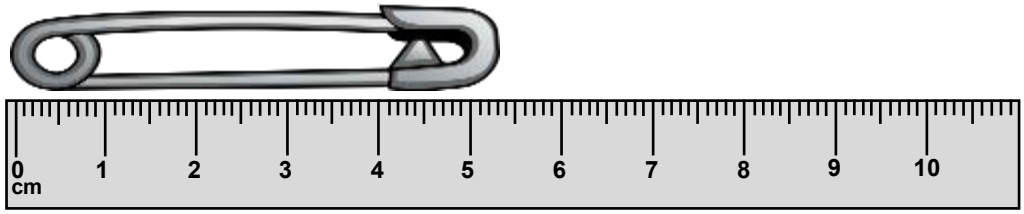
Measuring lengths, precision & errors

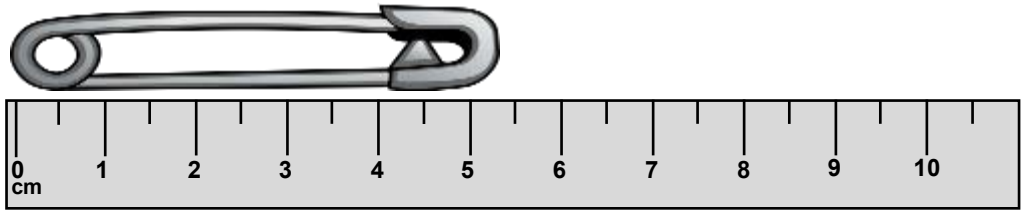
Grade 5 Measurement Worksheet

Ruler A



How long is the safety pin? _____

Ruler B



How long is the safety pin? _____

1. Which ruler is more precise, A or B? Why?

   _____

2. Are your measurements exact? Explain.

   _____

3. A seamstress measured a small cut pattern fabric for her project and wrote the measurement as 248 +/- 2 mm long. Why did the seamstress write the length like that?

   _____

4. What do you think the minimum length of the fabric is?

   _____

5. What do you think the maximum length of the fabric is?

   _____

Answers

Ruler A	
How long is the safety pin?	5 3/10 cm

Ruler B	
How long is the safety pin?	Between 5 and 51/2 cm

1. Which ruler is more precise, A or B? Why?

   Ruler B is more precise because it has smaller divisions.

2. Are your measurements exact? Explain.

   All physical measurements contain some uncertainty.

3. A seamstress measured a small cut pattern fabric for her project and wrote the measurement as 248 +/- 2 mm long. Why did the seamstress write the length like that?

   The seamstress knew that her measurement was not exact, and wanted to show that the length was between 246 and 250 mm

4. What do you think the minimum length of the fabric is?

   246 mm

5. What do you think the maximum length of the fabric is?

   250 mm