How to Draw Circles?

A. Choose the correct answer:

1. Which tool is used to draw circles accurately?

   a) Scale   b) Compass

   c) Protractor   d) Ruler

2. The fixed point from where a circle is drawn is called:

   a) Radius   b) Diameter

   c) Centre   d) Circumference

3. To draw a bigger circle, we must:

   a) Make the compass smaller   b) Open the compass wider

   c) Use a smaller pencil   d) Hold the compass loosely

4. If you draw a circle with a compass opening of 3 cm, the radius of the circle will be:

   a) 2 cm   b) 3 cm

   c) 6 cm   d) 1/2 cm

5. Which one of these is NOT needed to draw a circle?
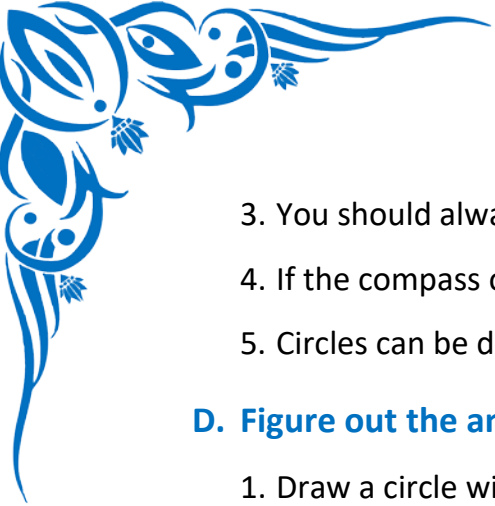
   a) Pencil   b) Compass

   c) Eraser   d) Scale

B. Write the Missing Terms to Complete the Sentences:

1. To draw a circle, we put the sharp point of the compass at the _____.

2. The distance from the center to any point on the circle is called _____.

3. If we increase the compass opening, the circle becomes _____.

4. Before drawing a circle, the pencil should be firmly placed in the _____.

5. A circle drawn with a radius of 5 cm has a diameter of _____ cm.

C. Mark each sentence with a True (✔) or False (✗):

1. A circle can be drawn perfectly without a compass.   _____

2. The compass point moves around the paper while drawing a circle.   _____

3. You should always keep the compass opening fixed while drawing a circle. _____

4. If the compass opening is 2 cm, the diameter of the circle is 4 cm. _____

5. Circles can be drawn using coins or lids if a compass is unavailable. _____

D. Figure out the answers to these questions:

1. Draw a circle with a radius of 4 cm and mark its center as O.

2. Explain how you would use a compass to draw a circle step by step.

3. If you want to draw a very small circle, how should you adjust your compass?

4. Name two mistakes you might make while drawing circles with a compass.

5. Why should you hold the compass carefully when drawing circles?

E. Challenge yourself with these questions:

1. Write down two objects at home you can use to draw circles without a compass.

2. Describe briefly why the center of a circle is important when drawing it.

3. If the radius of a circle is doubled, how will the circle change?

4. Imagine you lost your compass. Explain another way to draw a circle.

5. Draw two circles, one with a radius of 2 cm and another with a radius of 5 cm. Which one is larger, and why?