

Basic geometry vocabulary	Season	1
	Episode	AP01
	Time frame	1 period

Prerequisites : Basic concepts of geometry.

Objectives :

- Learn specific vocabulary about basic geometry.
- Describe a figure.
- Draw a figure following instructions.

Materials :

- *Geometry glossary.*
- *Matching cards with descriptions and figures.*
- *Chinese whispers cards.*

1 – Matching game with figures and descriptions

10 mins

Half of the students receive a card with a basic geometrical figure, the other half a description of one of these figures. Students mingle to find their partners without showing the cards. Then we mix up the cards again and they exchange roles.

2 – Glossary

10 mins

Working in pairs, students are handed out a geometry glossary and have to draw a figure where they all appear.

3 – Chinese whispers

35 mins

Students are placed in a circle and numbered from 1 to 20. « Odd » students are handed out a figure that they have to describe to their neighbour, without actually showing it, so that the other can draw it (secretly). Then the « even » students do the same to their neighbours, and so on three or five times. At the end, the initial figure is compared to the final one.

Basic geometry vocabulary

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Document	Glossary

For each of the three following word groups, draw a figure showing all the words. Write the words clearly on each figure.

Figure 1	Figure 2	Figure 3
Point	Line	Circle
Midpoint	Parallel to	Center
Endpoint	Perpendicular to	Diameter
Line segment	Passing through	Radius
Length	Right angle	Chord
	Intersection	Circumference

Document 1 Matching cards

Figure 1

Draw a circle and its diameter. Place the midpoint of the diameter. Through each endpoint of the diameter, draw a line segment perpendicular to the diameter and with the same length. Join the endpoints of these two segments to get a line segment parallel to the diameter. Finally, draw a line passing through one of the two last points and one of the endpoints of the diameter, so that this line is not perpendicular to the diameter.

Figure 2

Draw one line segment and the two other line segments passing through the endpoints of the first one, perpendicularly to it. The new segments should have the same length as the initial one and be on the same side of it. Join the second endpoints of the two new segments. Draw a line segment joining two of the four points, diagonally. Place the midpoint of this line segment. Draw a line parallel to the initial line segment, passing through this point. Finally, draw a circle passing through the midpoints of the first four segments.

Figure 3

Draw a line segment. From one endpoint, draw a new line segment, with the same length, perpendicular to the first one. Join the second endpoints of the two line segments. Join the midpoint of the third line segment, first to the intersection of the two first segments, then to their midpoints. Finally, draw a circle passing through the three midpoints, and place the midpoint of its diameter.

Figure 4

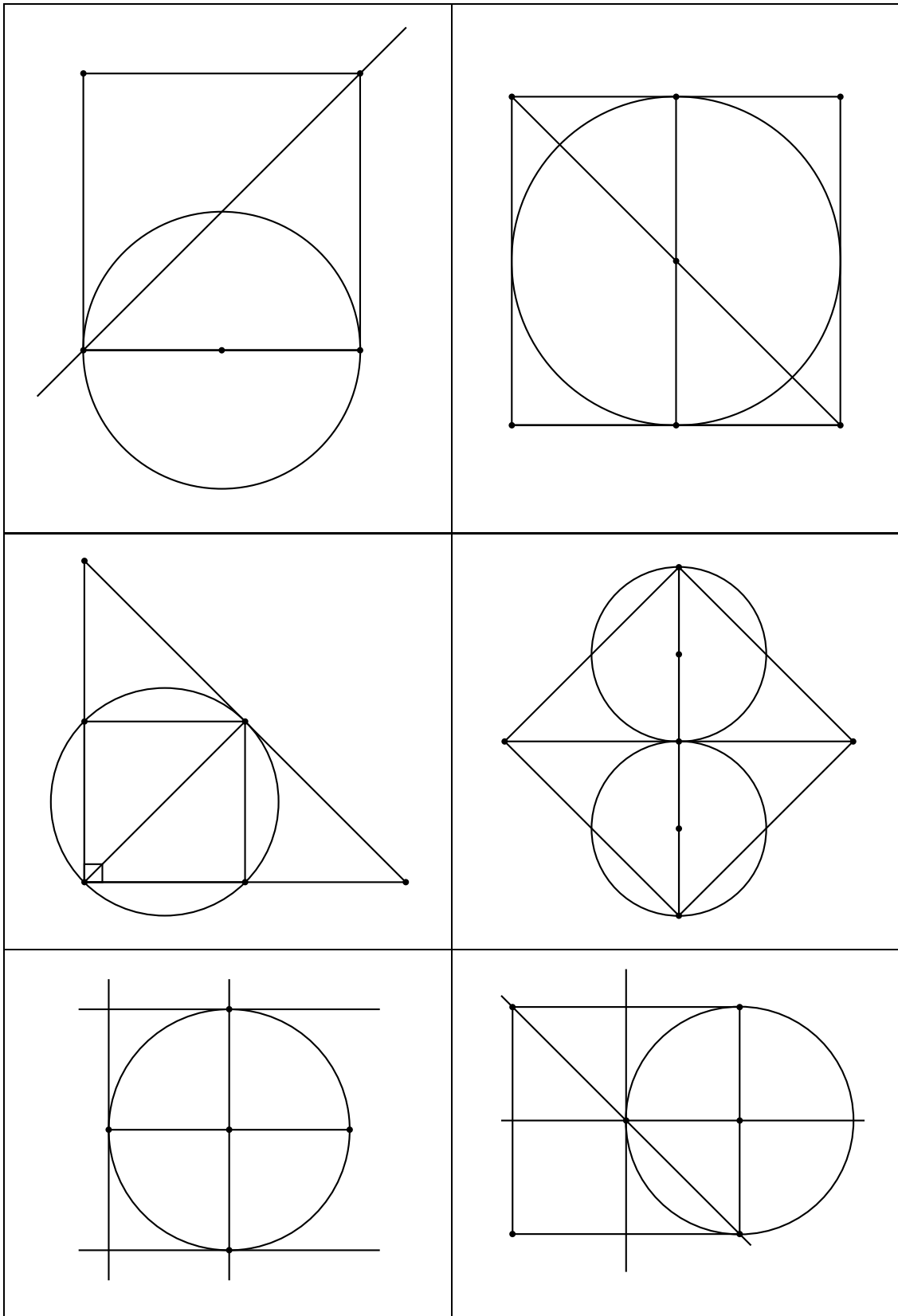
Draw a segment and divide it into two equal parts. Draw a circle passing through one endpoint and the midpoint, with its center on the segment. Do the same with the other half of the segment. Then, draw a line segment perpendicular to the first segment, passing through its midpoint, with the same length. Finally, join the endpoints of the two segments with two pairs of parallel lines.

Figure 5

Draw a line segment. Through its midpoint draw a line perpendicular to the segment. Then, through one endpoint of the segment, draw a line parallel to the one you just drew. Draw a circle whose center is the midpoint of the initial segment, passing through the endpoint where you draw one line. Finally, draw two parallel lines passing through the intersections of the circle and the second line you drew.

Figure 6

Draw a line segment. Complete the figure with three other line segments to make a square. Then, draw two lines, each one passing through the midpoints of two opposite sides of the square. Draw another line passing through two opposite corners. Finally, draw a circle passing through two corners of the square and its center.



Document 2 Chinese whispers cards

