



Counting Warm Up - Geometrical Shapes 2 (Project image on screen)

What are we counting: Shapes based on the description given. We decide what fits the description. Then count like things.

How are we counting: One by one or in groups/clusters, or by difference.

Primary level counting warm up questions:

(Comments in brackets are optional depending on ability range of students)

	Questions to ask	Answers and things to note
1	How many green things?	4 small green triangles
2	How many red things?	2 (they are quadrilaterals, more specifically trapezoids)
3	How many yellow things?	2 (They are hexagons, six sided polygons)
4	How many triangles?	6 a mix of 4 green and 2 orange ones
5	How many shapes altogether?	20 shapes in total (clustered in “5s” 3+2 or 4+1)
6	How many things with straight sides?	17 Count the actual straight sided (technical name is a polygon) shapes. Or, we know there are 20 shapes altogether, 3 of them have curved sides so take those away from 20 (20–3 = 17)
7	How many circles?	2. The other curved shape is an ellipse (or an oval)
8	How many blue things?	6 a mix of rounded and flat sided shapes.
9	How many shapes where all sides are equal?	13. Lots of them - count one by one.
10	How many shapes where the sides opposite are equal?	9 (hexagon, square, rectangle, rhombus, parallelogram). Gives opportunity to discuss “opposite.” Triangle’s sides are not opposite.
11	Compare the square to the rectangle. What other pair of shapes has a similar relationship? (Point to the shapes if the kids don’t know the terms yet.)	Circle to ellipse. Same shape but “stretched” in one direction.

Intermediate & up level counting warm up questions:

	Questions to ask	Answers and things to note
1	How many triangles? Are all the triangles the same? How are they similar? How are they different?	6 triangles in total Generically all are polygons, They all are triangles because they have 3 sides More specifically all are equilateral triangles all sides and angles are equal. 4 small green ones, two larger orange ones
2	How many quadrilaterals?	Any closed object with 4 straight sides. 8 in total
3	How many things altogether?	20 Have students come up and share how they get to 20. Objects are slightly clustered in 2+3 or 4+1, which you want them to “see” as 5s. (We’re not trying to be faster, we’re trying to see structure. Have students come up and trace circle groups of 2, 3, and 5)
4	How many non-polygons?	3 (2 circles + 1 Ellipse)
5	How many polygons?	17 (20–3 is fastest)
6	Compare the circle to the ellipse. Which other objects have a similar relationship?	square and rectangle.
7	How many parallelograms?	7 in total. There will be debate about whether rectangles, squares, and rhombuses belong, but they do. They all fit the description of 4 sided polygon with opposite sides parallel. Rectangles and squares are a subset of parallelograms.
8	What is a relationship between the triangle, square, hexagon, and circle?	Counting the number of sides. 3, 4, 6, ... as the number of sides in a regular (all sides equal) polygon increases, the shape approaches that of a circle.