

LOOK – SEE – SAY – SCRIPT - SYMBOLISE

Learning mathematics takes time.

Racing through questions and worksheets is not what is meant by the pace of a lesson. Skimming over the surface prevents access to understanding the nature and inter-connectedness of mathematics.

When we understand something we say “we see”.

These images are for **looking at**, pondering over and for discovering what we might **see**.

When something is seen, the teacher might ask the pupil to **say** what they see – and then write it on a board (**script** it). The teacher might then show how what is scripted may be **symbolised**.

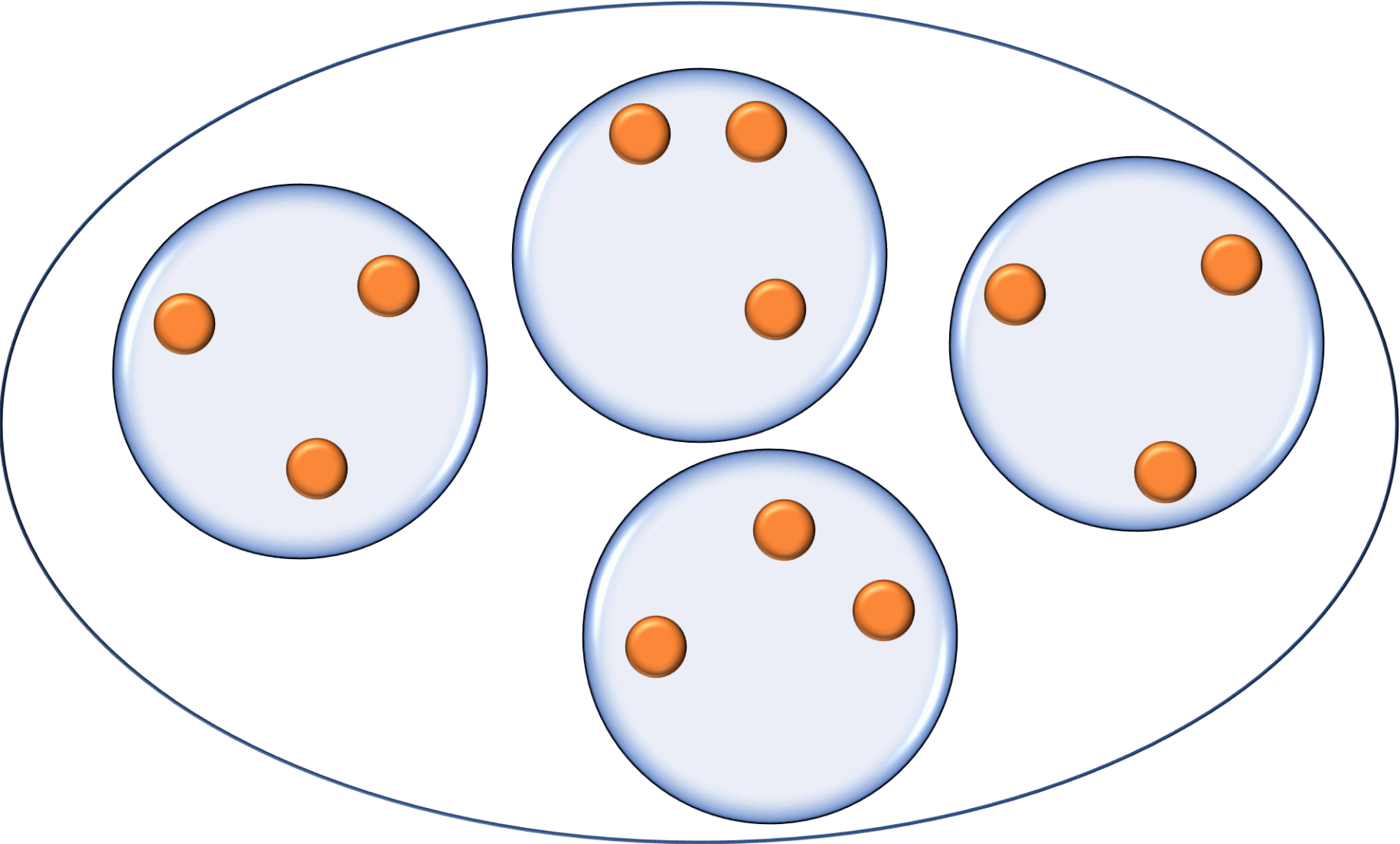
The first image is followed by an example of what might be recorded.

This is a lesson idea – it is not (yet) a record of a lesson taught.

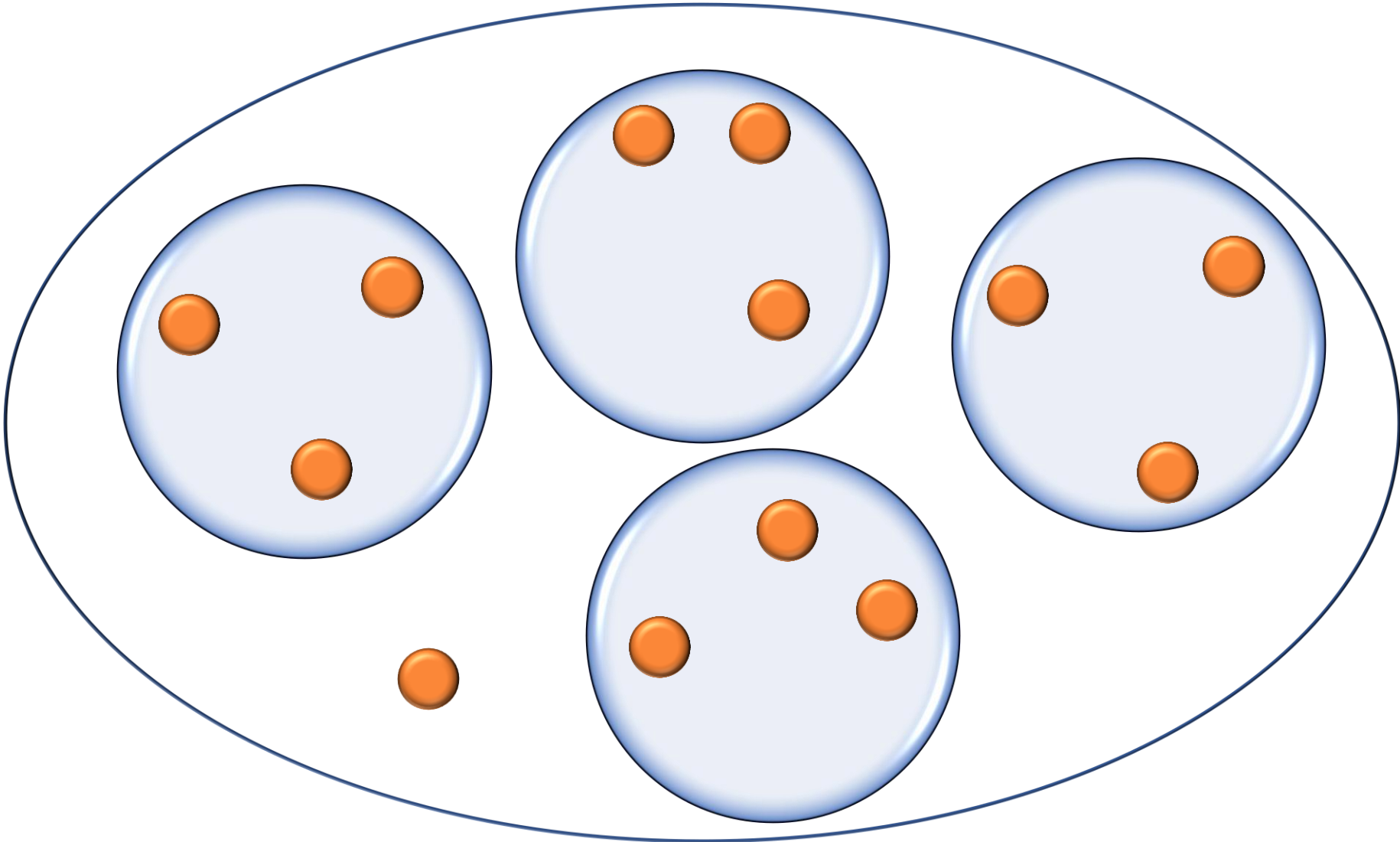
Maybe the pupils could create their own images.

It is intended to assist, not replace the teacher’s own lesson planning.

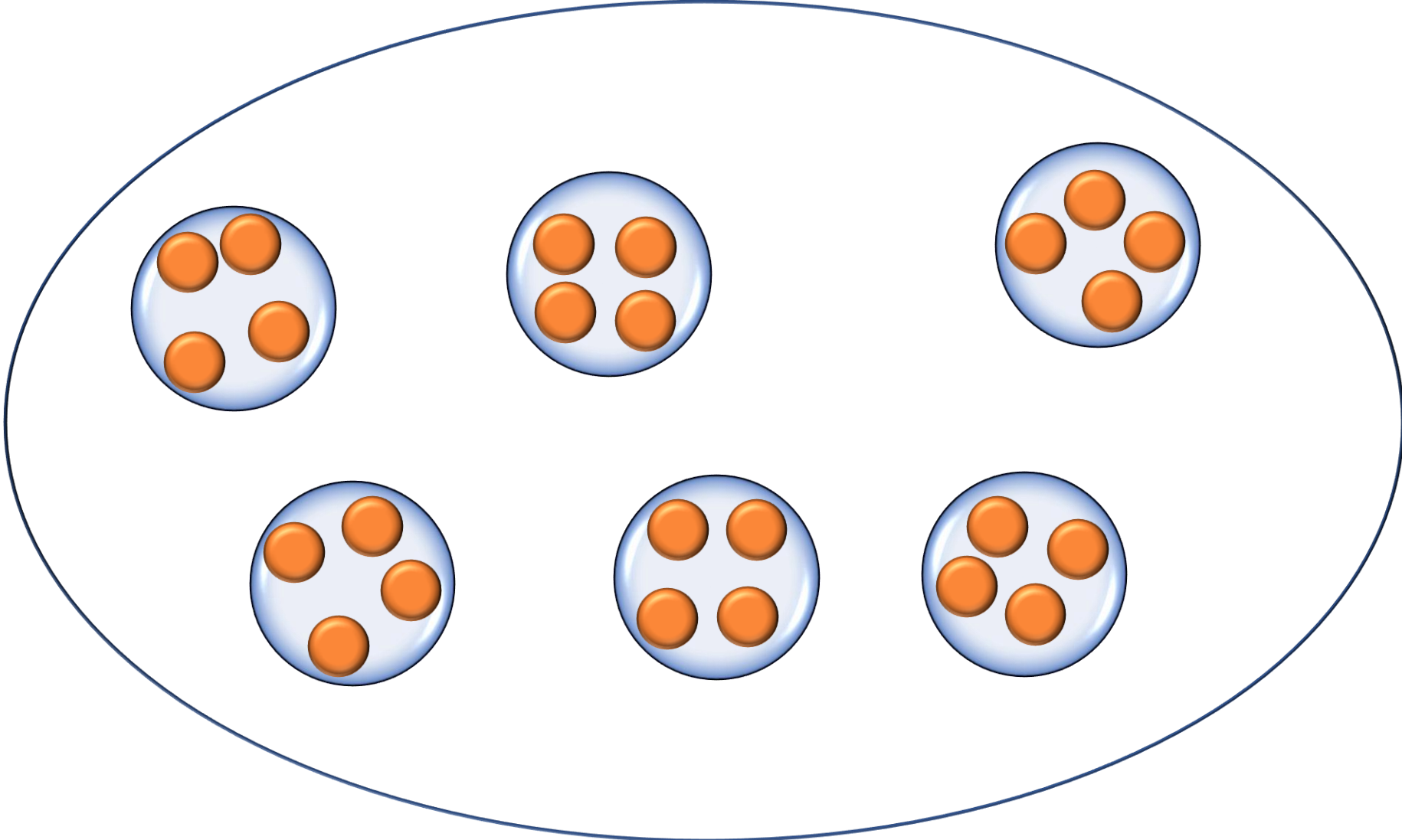
WHAT CAN YOU SEE?



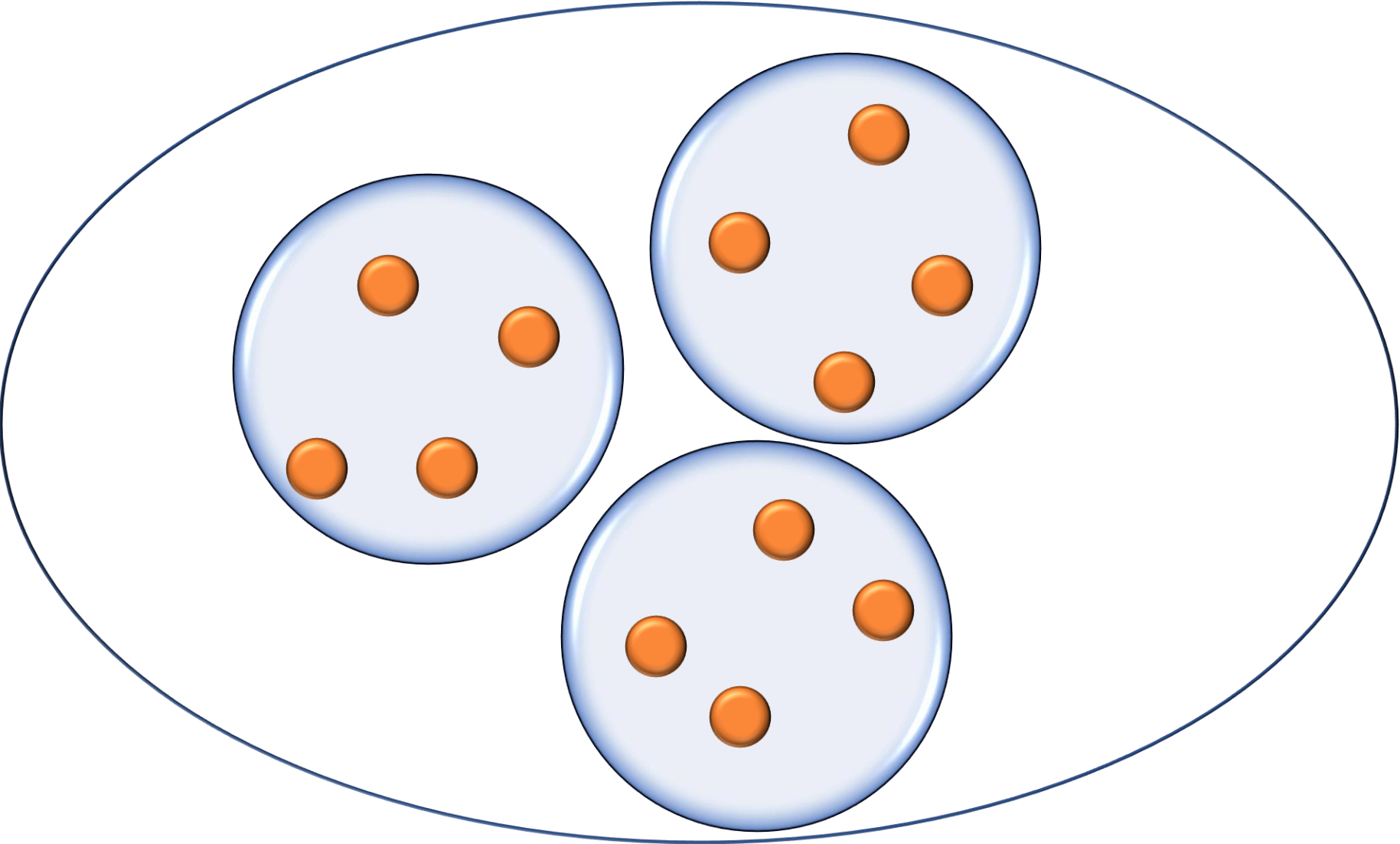
WHAT CAN YOU SEE?



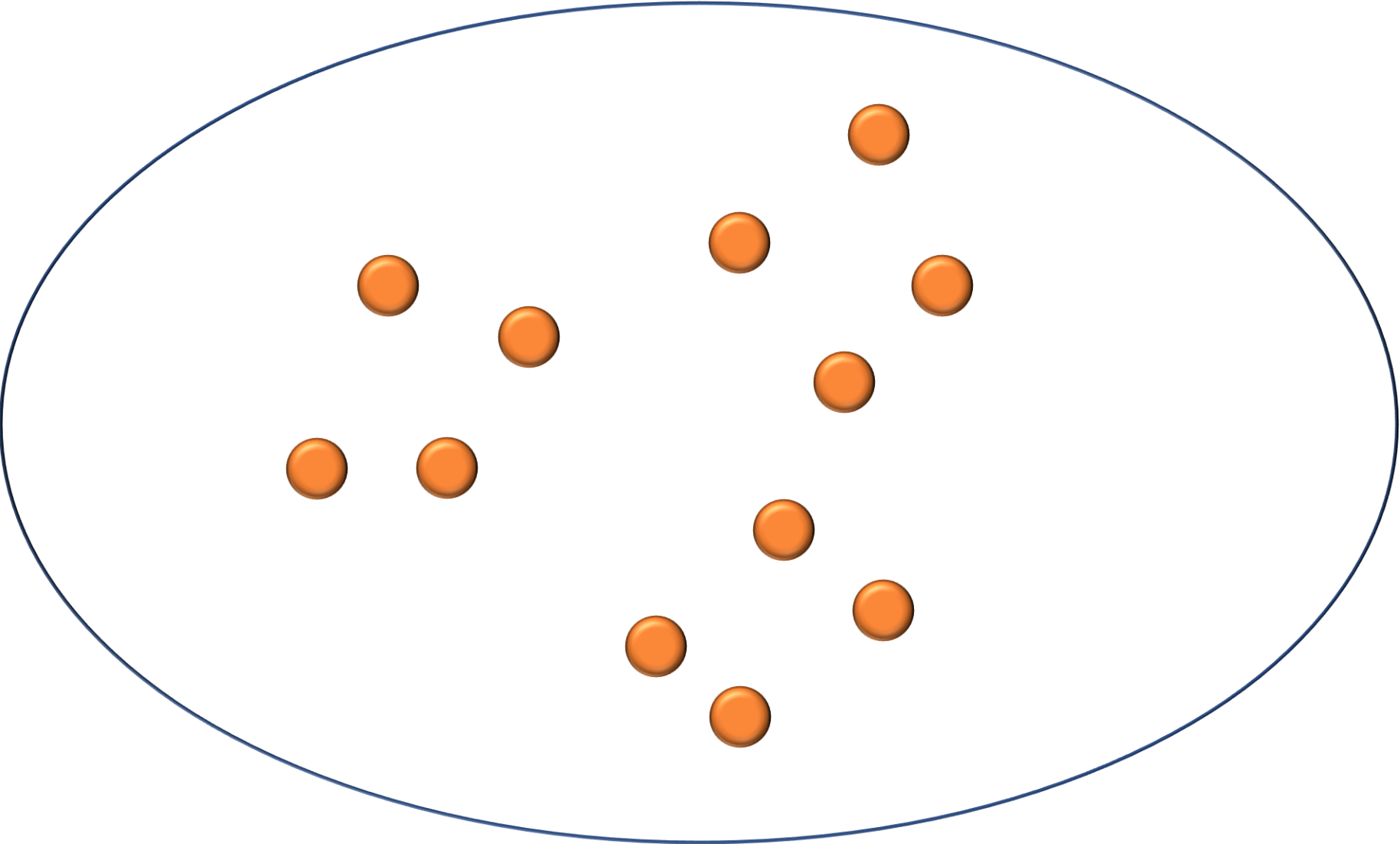
WHAT CAN YOU SEE?



WHAT CAN YOU SEE?



WHAT CAN YOU MAKE?



LOOK, SEE, SAY, SCRIPT, SYMBOLISE

SAY/ SCRIPT	SYMBOLISE
I can see twelve counters	12
I can see 4 sets of 3 counters	$3 + 3 + 3 + 3 = 12$ $3 \times 4 = 12$
I can see 3 counters in each of 4 sets	$4 \times 3 = 12$
I can see 2 sets of 3 and 2 sets of 3	$(2 \times 3) + (2 \times 3) = (4 \times 3) = 12$
I can see 1 set of 3 and 3 sets of 3	$(1 \times 3) + (3 \times 3) = (4 \times 3) = 12$
I can divide 12 counters into 4 sets of 3	$12 \div 4 = 3$
If I divide 12 into sets of 3 there are 4 of them	$12 \div 3 = 4$
Half of 4 sets of 3 is 2 sets of 3	$(4 \times 3) \div 2 = (2 \times 3) = 6$ $\frac{1}{2} (4 \times 3) = (2 \times 3) = 6$
A quarter of 12 is 3	$\frac{1}{4} \times 12 = 3$
4 sets of 3 take away 3 sets of 3 leaves 1 set of 3	$(4 \times 3) - (3 \times 3) = (1 \times 3)$