w/c/ 20.04.20 DAY 3

WALT repeat patterns

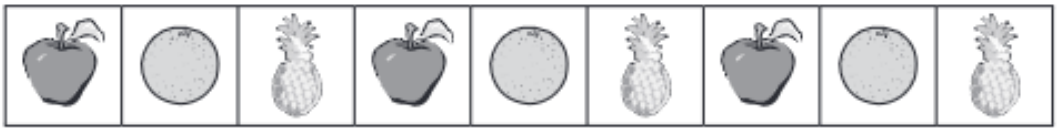
Patterns follow very strict rules. Look at this pattern.

The rule is
circle triangle square

The pattern repeats this rule over and over.

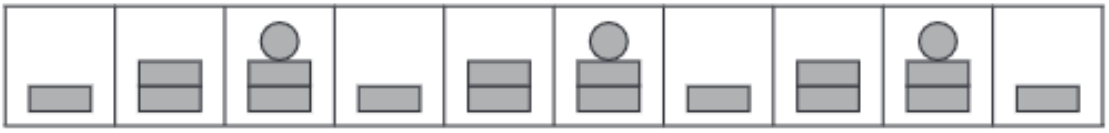
1 Circle the rule in each repeating pattern. Record it below.

a



The rule is

b



The rule is

2 Make up a rule and record it somewhere secret. Draw your rule (or make it with blocks) and repeat it over and over. Ask a partner to identify your pattern rule and record it here. Tick it if they were right.

w/c/ 20.04.20 DAY 3

WALT repeat patterns

If there is no rule, it is NOT a pattern.

This is not a pattern, it is just a row of shapes.

1 Look at these rows. Tick the ones that follow a pattern rule.

a ☐

b ☐

c ☐

2 Look at these rows. They started off as patterns but went a bit astray. Circle the parts that don't follow the patterns and give the rows a good telling off. Tell them there are many rows that would like to be patterns and if they can't do it properly, you'll give the job to other rows.

a

b

1 Create three related facts for these number sentences.

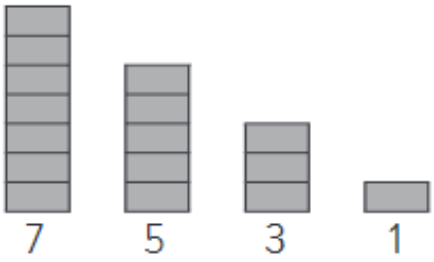
a	9 + 8 = 17	8 + 9 = 17	17 – 8 = 9	17 – 9 = 8
b	10 – 1 = 9			
c	7 + 8 = 15			
d	16 – 9 = ☐			
e	4 + 9 = ☐			

2 Write in the missing symbols to complete these related facts. The first one has been done for you.

a	9 ☐ 8 = 17	8 ☐ 9 = 17	17 ☐ 8 = 9	17 ☐ 9 = 8
b	14 ☐ 6 = 8	6 ☐ 8 = 14	8 ☐ 6 = 14	14 ☐ 8 = 6
c	3 ☐ 8 = 11	11 ☐ 3 = 8	11 ☐ 8 = 3	8 ☐ 3 = 11
d	13 ☐ 6 = 7	6 ☐ 7 = 13	13 ☐ 7 = 6	7 ☐ 6 = 13
e	9 ☐ 8 = 1	9 ☐ 1 = 8	1 ☐ 8 = 9	8 ☐ 1 = 9

Investigation: Shrinking Patterns

Patterns can also shrink. Look at this pattern.



It follows a –2 rule.
In each stage we have
2 fewer blocks.

You will need: a partner counters

What to do:

Start with 10 counters. ●●●●●●●●●●

Take some away so there are only **7 left**. ●●●●●●●

Then take some more away so there are only **4 left**. ●●●●

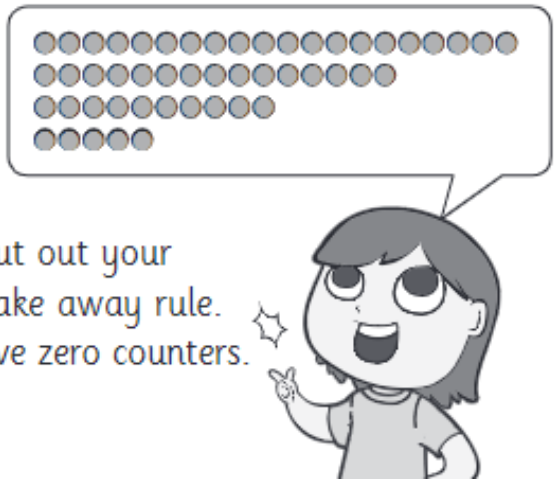
Now take some away so there is only **1 left**. ●

a How many counters are you taking away each time? _____

b What is the rule? _____

What to do next:

Think of a different take away rule. Write it somewhere secret. Don't let your partner see!

Put out 20 counters in a row. Then put out your next row of counters following your take away rule. Continue until your last row would have zero counters.

Guess each other's secret rule!