Pick two

Pick 2 of these numbers.
Add them together.
Write your answer.

$$\boxed{1} \quad \boxed{4} \quad \boxed{2} \quad \boxed{8}$$
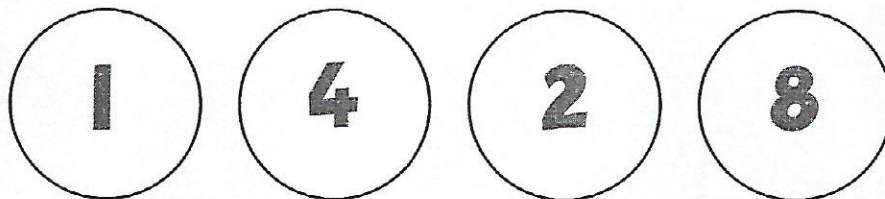
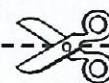Now keep picking 2 different numbers.
Write their total.

Do it in different ways.
How many different answers can you get?

Now take one number from the other.
How many different answers can you get?

Write all your answers and bring them to school.

Solution: Pick two

There are 6 different sums and 6 different (positive) differences.

1 + 2 = 3	1 + 4 = 5	2 + 4 = 6
1 + 8 = 9	2 + 8 = 10	4 + 8 = 12

2 − 1 = 1	4 − 2 = 2	4 − 1 = 3
8 − 4 = 4	8 − 2 = 6	8 − 1 = 7

The puzzle can be adapted for older children by using larger numbers.