

Catch-up for Year 1: Key skills from Reception

Number Facts

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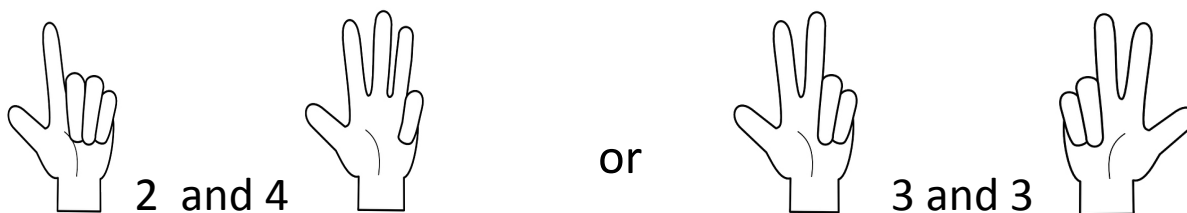
Activity name	Focus
Finger sums	Number bonds to 6, 7 and 8
Ten pegs on a hanger	Addition facts for 10
Ten on a tray	How many more to make 10?
Turn and match	Find pairs to 10
Handy sums	Recall addition facts for numbers 2 to 10
Magical grid patterns	Recall doubles; add two 1-digit numbers
Chuck the coins	How many more to make 10?
Hands behind your back	How many more to make 10?

Finger sums

You need number cards 6, 7 and 8, felt tips and paper

What to do

- Place the **6** card in the middle of the table.
- Ask the child to show you 6 fingers standing up and the rest folded down.
- Look at how the fingers are distributed across their two hands, e.g.



- Together say the addition – two and four make six.
- Record this on paper: $2 + 4 = 6$
- Fold down two fingers and say the subtraction: 6 take away 3 leaves 3
- Record this: $6 - 2 = 4$
- Ask the child to show a different arrangement of six fingers, e.g. 3 and 3
- Say this together and record it. $3 + 3 = 6$
- Fold down 3 fingers and say the subtraction: $6 - 3 = 3$
- How many different ways can you do this for 6?

Repeat this starting with the 7 card.

How many ways do you think there will be of making 7 using fingers?

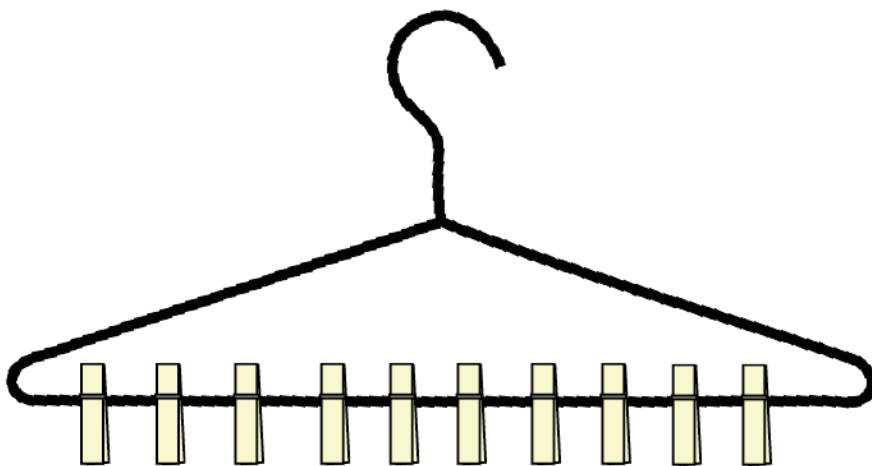
Challenge – how many ways of making 8? Predict first...

Ten Pegs on a Hanger

You need: number cards, 0 to 10 with two number 5s. Also, a metal coat hanger, ten clothes pegs and a tea-towel. *(If you don't have pegs, you can create the same effect by hanging paper clips or safety pins or even bracelets or hair ties from the coat hanger!)*

How to play

- Lay out the number cards face up.
- Peg ten pegs along the coat-hanger. Count them along it, touching each one as you go. One, two, three, etc.
- Ask your child to turn around. Cover some of the pegs by hanging the tea-towel over it.
- The child must choose the number card to match the number of pegs hidden. They show you.
- Reveal the hidden pegs – were they correct?
- If so, they find the number card to match the pegs which were not hidden.



- Write a matching addition for these pegs, e.g. $6 + 4 = 10$
- Now play again, with you hiding a different number of pegs.
- Keep playing like this, perhaps taking turns to hide the pegs.

Ten on a tray

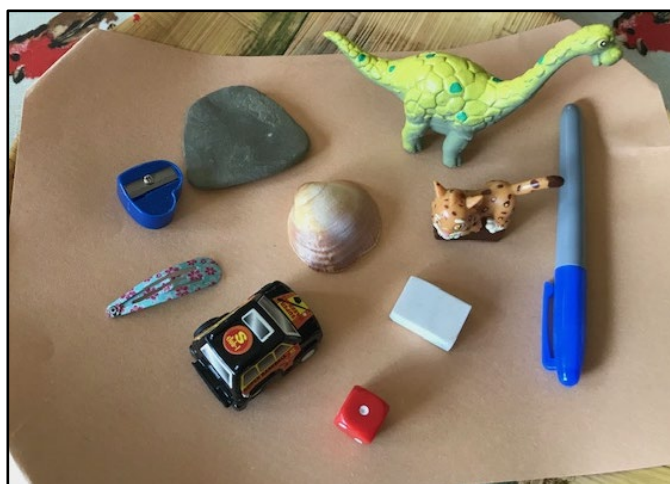
You need ten objects, each one different, e.g. very small toys, vehicles, figures or animals, pens, rubbers, sharpeners, etc, and a tea-towel.

Also some small change – brown coins or 5ps or 10ps.

How to play

You need a partner to play with.

- Find a tray and then find ten small items to place on it.
- Discuss how to arrange the objects, so that you both really have a picture in your mind of how the things look on the tray.
- Shut your eyes and then open them and make sure you can remember what is on the tray!
- Now one person turns their back and/or wears a blindfold. No peeking!
- Their partner removes up to 5 things from the tray and hides them under the tea-towel.
- The first person turns round and has to say...
 1. How many things have been taken off the tray.
 2. What they were.
- They get a coin if they can say how many things are missing.
- They get another coin if they can name some of the missing objects.



HINT

If you count the things ON the tray holding up one finger for every item, then the number of fingers still folded down is the number of things missing.

Have six goes each. Who has the most coins at the end?

Turn and Match

You need your 24 home-made cards (see below this page)

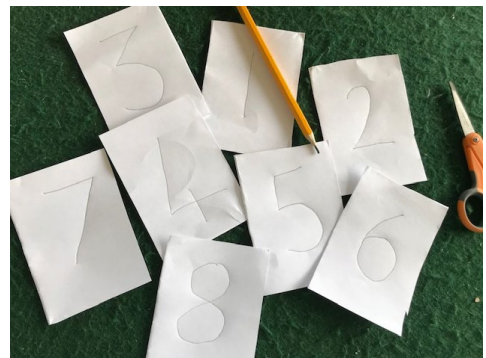
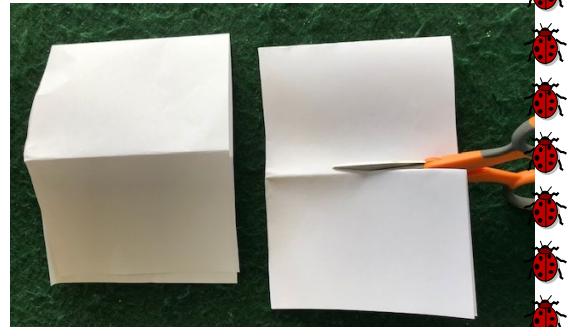
What to do:

- Make your cards. You must cut these out carefully.
- Spread all the cards upside down on the table. No card must overlap another card.
- Turn over a card. Read the number. Turn over a second card. Read the number.
- If the two cards add to make 10 you can keep them!
- If the two cards do not add to make 10, turn them back over so they are face down. Try to remember where they are – it will help you later!
- Your partner has a go, doing the same thing.
- Have another turn. But this time, turn over a card you haven't tried before. Maybe one of the cards you turned over last time might match your new card to make 10? Do you remember where it was?
- Keep playing like this until all the cards have been taken.
- The person with the more pairs is the winner.



Home-made cards

- Take an A4 piece of white paper.
- Fold an A4 page into half, into half again, into half again and into half again. (Folding 4 times!)
- Press each of the folds flat as you go.
- Open out until the paper is folded just in half.
- Cut along the folds.
- Continue cutting along the folds until your page is cut into 8 equal pieces.
- Spread out the eight pieces – these are the first set of cards!
- Take a pencil and write the numbers 1 to 8 on the cards.
- Do not press hard. It is very important that when you turn over the cards, you cannot make out the number.



Now do this again TWICE

- On the second set of 8 cards write these numbers: 9, 10, 0, 1, 2, 3, 4, 5
- On the third set of 8 cards, write these numbers: 5, 5, 6, 7, 8, 9, 0, 10

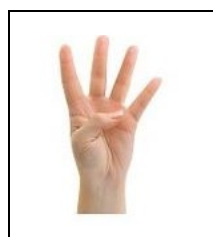
Handy sums

You need a cup or bowl plus counters (or small, dry pasta pieces, Lego bricks or beads).

What to do

You have a cup each. Place the counters in the middle of the table.

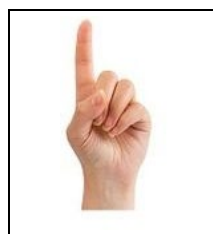
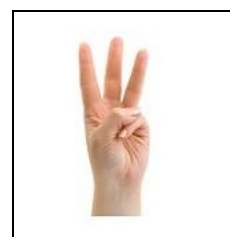
- Both of you put one hand behind your back. Say: ready, steady, go!
- Then, at 'Go!' you both bring that hand out with some fingers standing up and some or none folded down.
- Agree the sum. Write it down. Then work out the total.



So one of you might show 4 fingers.

The other person might show 3 fingers.

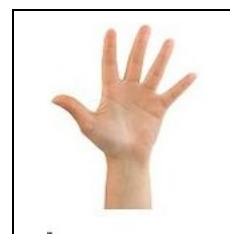
The sum is $4 + 3 = 7$



Or one of you might show 1 finger.

The other person might show 5 fingers.

The sum is $1 + 5 = 6$



- Repeat this, but this time **start competing**.
- Once the hands are shown, one person has to say the total as quickly as they can.
- The first person to say the total, takes that number of counters and puts them in their cup.
- Repeat six times. Who has the most counters in the end?

Magical grid patterns

You will need: counters which can be little bricks, beads, pieces of dried pasta, or shells. You can use the counters to help you do the additions.

What to do

- Study the grid.
- Circle the middle number.
- Double it – this means that you add it to itself.
 $4 + 4 = ?$
- Now add the two opposite corner numbers – they are red.
- Add the other two opposite corner numbers which are blue.
- What do you notice about your three answers?
- Try this second grid.

0	1	2
3	4	5
6	7	8

1	2	3
4	5	6
7	8	9

- Then write numbers in the third grid, starting with any number you like and writing the numbers in order along the rows.
- Does the magic always work?

Challenge

Draw your own grid and have a top row of 10, 20, 30 and a middle row of 40, 50, 60 and a bottom row of 70, 80, 80.

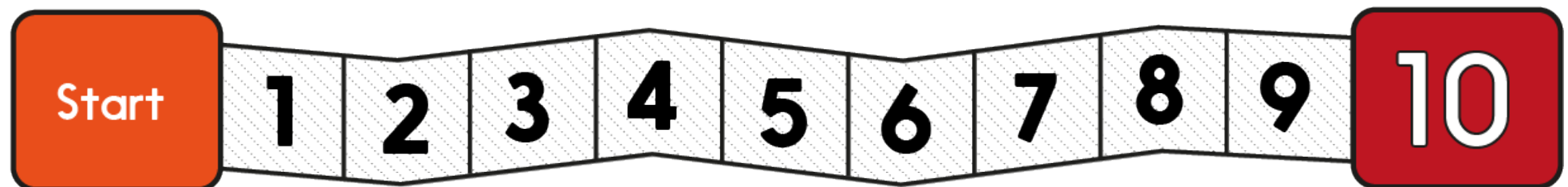
Predict what the magic number will be when you double the middle and add the opposite corners.

Chuck the coins

You need ten coins – preferably all the same type, a mug in which to place them, and the board below. Also a counter each.

How to play

- Each player places their counter at the start of a track below.
- Take turns to tip the ten coins out of the mug.
- Count the number of coins which are heads up. Say the number aloud, e.g. **Six**.
- Without counting the tails, **SAY** how many coins will be tails. ***I think four!***
- Count to check. Were you correct? If so, move your counter one space along your track. If you were not correct, you stay put.
- First player to reach ten is the winner.



Hands behind your back

You need: Twenty counters or raisins or Lego™ bricks, beads or shells, etc.

How to play

- Take turns to place both hands behind your back. On your hands, fold down some fingers. It could be none, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10.
- Tell your partner the number of fingers standing up, e.g. *I have 4 fingers standing up*.
- Your partner must show many fingers are folded down on their own hands, e.g. they say, *You have six fingers folded down*. And they show you their hands with 6 fingers folded down.
- Bring out your hands and show your partner.
Do your hands match theirs? Have you both got the same number of fingers folded down?



- If your partner has shown the matching number of folded fingers to you, you may both take a counter.
- Keep playing until you both have collected ten counters.
- Now together complete the pairs to ten on the sheet below.

$1 + \square = 10$

$2 + \square = 10$

$3 + \square = 10$

$4 + \square = 10$

$5 + \square = 10$

$6 + \square = 10$

$7 + \square = 10$

$8 + \square = 10$

$9 + \square = 10$