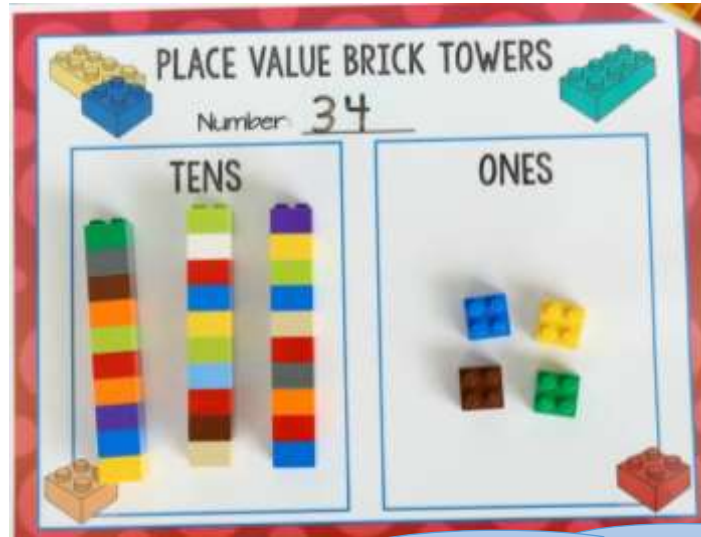## Activity: Representing 2-digit Numbers Concretely

Preparation/ Resources:

- Gather whichever of the following you have at home, or similar:
  - 50 straws
  - 50 spaghetti strands
  - 3 rubber bands
  - 5 x 10p coins and 9 x 1 p coins
  - Counters
  - Lego bricks
  - 50 raisins
  - 5 cup cake cases
- Print or make digit cards 0-9

PLACE VALUE BRICK TOWERS
Number 34
TENS   ONES

Look, Listen and Note:

- Can your child read 2-digit numbers (10-50)? If not, practise this skill.
- Can they count in 10s? If not, practise this skill.
- Can they represent 2-digit numbers as made up of tens and ones?
- Can they explain how they have represented the number?
- Can they say what the first digit represents? (e.g. the 3 in 34 represents 3 tens).

Top tip: 'represent' = stand for/ show/ picture

Activity:

Pick two digit cards and put them next to each other so that they make a 2-digit number (e.g. 35). Ask your child to read the number. If they find this difficult, choose a smaller number.

Show your child how they can represent the number by grouping items into tens and ones. E.g.:

For the number 35, make 3 bundles of 10 straws and secure them using rubber bands. Point to each bundle and count up in tens out loud '10, 20, 30'. Then count on in ones, putting single straws next to the bundles '31, 32, 33, 34, 35'. Show your child how they can see from the straws that 35 is made of 3 groups of 10 and 5 ones.

Invite your child to explore how they can make the same number using the other objects you have gathered. Then try the same with some other 2-digit numbers. They might:

- Build 3 towers of 10 lego bricks, with 5 loose bricks next to them.
- Fill 3 cupcake cases with 10 raisins in each, and 5 loose raisins next to them.
- Put 3 x 10p pieces next to 5 x 1p pieces.

Take it further:

Represent two 2-digit numbers. Which is greater? Which is smaller? How do you know?

Activity: Representing 2-digit Numbers Pictorially

Preparation/ Resources:

- Print or make:
  o Number cards 0-9 (if not already made)
  o Base 10 tens and ones
  o Ten frames
  o Place value grids
  o Part-whole models
  o Numicon shapes x 2
- Gather:
  o Small objects such as raisins, pasta or lego to use as counters.
  o If possible, spaghetti and rubber bands.

Look, Listen and Note:

- Can your child read 2-digit numbers (10-50)? If not, practise this skill.
- Can they count in 10s? If not, practise this skill.
- Can they represent 2-digit numbers as made up of tens and ones?
- Can they explain how they have represented the number?
- Can they say what the first digit represents? (e.g. the 3 in 34 represents 3 tens).
- Can your child write the number in words (e.g. 'thirty-four')?

Activity:

Pick 2 digit cards and place side by side to make a 2-digit number (e.g. 23).

Demonstrate how to represent the number using one of the methods above. E.g. fill 2 ten-frames with 20 objects, count '10, 20', then count on 3 loose ones '21, 22, 23'.

Allow your child to explore different ways of representing the number.

Questions to ask:

- Which number have you represented?
- What does the first digit represent?
- What does the second digit represent?
- Which are the tens and which are the ones?

Take it further:

- Give your child a group of objects to find out how many there are. Invite them to represent the number as tens and ones. Can they make the number using digit cards?
- What would 1 more/ 1 less than the number be? How would you represent it?
- What would 10 more/ 10 less be?
- Instead of digit cards, pick a number word card for your child to read and represent (e.g. 'thirty-two').
- Give your child two numbers with the same digits (13 and 31). What's the difference?

Number Skills

Count forwards <u>and backwards</u> from 0-100.
Count in 2s and 10s.

Preparation/ Resources:

- Print or make a giant number line.
- Find one or more small toys that can be used to 'jump' along the number line.

Look, Listen and Note:

- Can your child read the numbers on the number line?
- Is there a part of the number line that your child finds more tricky? (e.g. numbers over 20, teen numbers etc.)
- Can your child count backwards as well as forwards?

Activity ideas:

Practise counting forwards and backwards from 0 to 100 every day using songs. Invite your child to dance, or hop a toy up and down a giant number line as they count.

Song for counting up from 0 to 100:
https://www.youtube.com/watch?v=bGetqbqDVaA
Song for counting backwards from 100 to 0:
https://www.youtube.com/watch?v=-iwgJmW1uvg

Do the same for counting forwards and backwards in 2s and 10s.
https://www.youtube.com/watch?v=OCxvNtrcDIs
https://www.youtube.com/watch?v=7stosHbZZZg

Take it further:

Start from a random number and ask your child to count forwards or backwards from there in 1s, 2s or 10s.

Ask your child to fill in the missing numbers in a number line (see worksheet).

Challenge your child to find a random number as quickly as they can on the number line.

Compare numbers in terms of 'greater' and 'smaller', asking questions like 'Which is greater: 24 or 31?'

Ask questions like: What is 1 more than 15? What is 10 less than 50? What is 2 less than 26?