

# Week 2 - Package 1 - Year 1 & 2 Mathematics - Strike it Out

(from NRICH Maths [Strike it Out Poster](#))

## Things you need

Have these things available so your child can complete this task

Ideal	Back up
3 coloured markers or pens	Colour pencils
Plain paper	

## Why is this activity important?

This is a great activity to increase skills in reasoning, working collaboratively, and applying knowledge of strategies used to add and subtract. The game can easily be played with learners having different skill levels, also allowing you to investigate winning strategies and using all the numbers along the number line. On Day 1 just play this game and then on consequent days, encourage your child to delve deeper into finding unique number combinations to help them win.

## Before I start

The game requires mathematical thinking and the child should be given sufficient thinking time during each turn.

Gather the materials needed.

## What my child needs to know and do

Watch the [Strike It Out video](#).

## What to do next



The first player chooses a number on the line and crosses it out.

The same player then chooses a second number and crosses that out too.

Finally, he or she circles the total or difference of the two numbers and writes down the calculation.

For example, the first player's go could look like this:



$$3 + 8 = 11$$

The second player must start by crossing off the number that player 1 has just circled. He or she then chooses another number to cross out and then circles a third number which is the total or difference of the two crossed-off numbers.

Player 2 also writes down their calculation.

For example, once the second player has had a turn, the game could look like this:



$$3 + 8 = 11$$

$$11 + 9 = 20$$

Play continues in this way with each player starting with the number that has just been circled.

For example, player one could then have a turn which left the game looking like this:



$$3 + 8 = 11$$

$$11 + 9 = 20$$

$$20 - 4 = 16$$

The winner of the game is the player who stops their opponent from being able to have a go.

## Options for your child

Activity too hard?	Activity too easy?
<b>Provide the child with counters/ blocks to work out options</b>	Explore different number lines. Include multiplication and division.

## Follow-up questions to ask your child

What could you have done differently?

Is there a strategy you can use to make it harder for your opponent?

Is there another number sentence you could make with the same numbers? How would that change the game for your opponent?

## Extension/Additional activity

Play the game using multiplication and division operations.

Try playing [101 and you're out!](#)

# Week 2 - Package 2 - Year 1 & 2 Mathematics - Number Busting

## Things you need

Have these things available so your child can complete this task

Ideal	Back up
26 counters	26 pieces of pasta 26 pieces of lego 26 pencils
Piece of paper	
Pencils / textas / crayons	

## Why is this activity important?

This activity provides opportunities for your child to use mental maths strategies helping to improve their understanding of numbers. Developing a good number sense is important because it encourages the child to think in flexible ways, promoting confidence when working with numbers. The game can easily be played with learners having different skill levels, by getting them to explore numbers they are familiar with, gradually moving to higher numbers. Students may be able to use addition and subtraction to explain their thinking or they may start to use all four operations.

## Before you start

It is important to choose a number within the range of numbers they are confident with.

Encourage the child to represent their thinking in words (2 tens and 6 ones) rather than as a number sentence ( $20+6$ )

The game requires mathematical thinking and the child should be given sufficient think time between each attempt.

# What your child needs to know and do

Watch the [Number busting video here](#).

## What to do next

Get 26 items (for example, pasta pieces, counters or pencils).

Organise and describe your collection. If using 26 counters you might organise into 2 lots of 10 and 1 lot of 6.  $10 + 10 + 6 = 26$  (Ask your child – what can you see? How many are there?)

Try to reorganise and describe your collection as many times as you can within the next 5 minutes.

Draw and record all of your ways of thinking about your collection.

Play the game again with another number.

## Options for your child

Activity too hard?	Activity too easy?
Use less items – maybe 10 or 15.	Choose a higher 2-digit number between 50-100 Choose a 3-digit number Ask the child to show multiplication number sentences that make the target number.

## Follow-up questions to ask your child

How many ways did you make the number?

Are there other number combinations you could use?

Why did you use this number combination?

Which one of these is the most efficient way to make the number?

Is using tens and ones the best way?

# Extension/Additional activity

Play the game with many different target numbers to develop a strong sense of the relationships between numbers.

Play [101 and you're out!](#)

# Week 2 - Package 3 - Year 1 & 2 Mathematics - 101 and you're out!

(From Win Win Games by Marilyn Burns)

## Things you need

Have these things available so your child can complete this task

Ideal	Back up
2 coloured markers or pens	Colour pencils
Plain paper	
Dice or numeral cards	Playing cards(A-9), Number spinner

## Why is this activity important?

This activity helps improve a child's understanding of numbers, place value knowledge and the use of additive strategies. Developing a good number sense is important because it encourages the child to think in flexible ways, promoting confidence when working with numbers. The game can easily be played individually, competitively or collaboratively with learners having different skill levels, by getting them to explore numbers they are familiar with, gradually moving to higher numbers.

## Before I start

The game requires mathematical thinking and the child should be given sufficient think time during each turn.

It is important to choose a number within the child's range of numbers they are confident with.

Gather the materials needed.

# What my child needs to know and do

Watch the [video 101 and you're out.](#)

## What to do next

Each player makes a game board by drawing a 6 x 4 table.

Tens	Ones	Number	Total

Label the first column as 'tens', the second column as 'ones', the third column as number and fourth column as total.

Each time you roll the dice, you have to decide whether the number is representing 'ones' or 'tens'. For example, if I roll a 3, I could use it as 3 ones (3) or 3 tens (which we rename as 30). If you choose to use your 3 as 3 ones, record the number in the ones column. If you choose to use your 3 as 3 tens (30), record your number in the left tens column. Each player must record the number rolled in their table.

Continue to play for six rolls.

Once you write a number, you can't change it.

The winner is the player with the sum that is closest to 100 without going over!

Draw up 4 new game boards. Using the same numbers you rolled, use the game boards to get closer to 100 than you did in your first game.

## Options for your child

Activity too hard?	Activity too easy?
<b>Provide the child with a hundreds chart to refer to during the game.</b> <b>Give the child concrete materials like pasta/ toothpicks, counters etc</b> <b>Change the target number to a smaller number. e.g 50 instead of 100.</b>	Increase the challenge by using numbers from 1-9. Roll the dice 4 times and only use four lines on the game board. Increase the target number to 200.

# Follow-up questions to ask your child

Did you get closer to 100 on your second go with the same numbers?

Why do you think that was?

What advice would you give to someone playing this game for the first time?

## Extension/Additional activity

Make numbers up to 200.

The child writes number sentences to show their working out.

Watch the [Strike It Out video](#).

# Week 2 - Package 4 - Year 1 & 2 Mathematics - Sam and Holly's Problem

## Things you need

Have these things available so your child can complete this task

Ideal	Back up
10 blocks	10 pieces of pasta 10 pieces of lego
A cup	A piece of paper

## Why is this activity important?

This activity explores and builds on your child's knowledge of the combinations to 10.

## Before I start

Ask your child if they have heard of 'friends of ten'? Explain to your child that 'friends of ten' is when numbers add together to make the number 10.

# What my child needs to know and do

Watch the [Sam and Holly's Problem video here.](#)

## What to do next

Get ten blocks out. Cover some of the blocks and ask your child how many are missing. (Your child may like to draw what they can see, this will help build their understanding).

You may like to use two cups or two pieces of paper to cover the counters.

Ask your child to write down the number sentence, For eg.  $6 + 4 = 10$ .

## Options for your child

Activity too hard?	Activity too easy?										
<p><b>Draw a ten frames table to help your child visualise and give them 10 their own set of 10 blocks(or objects)</b></p> <table border="1" data-bbox="164 1317 738 1422"><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>											<p>You can use 20 counters to make friends of 20.</p> <p>Play the game using number cards instead of blocks.</p>

## Follow-up questions to ask your child

How did you know how many counters were hiding? Is there another way of figuring it out?

## Extension/Additional activity

Play the game to make friends of numbers 3-9.

Watch the [Number busting video here.](#)

# Week 2 - Package 5 - Year 1 & 2 Mathematics - Building towers

## Things you need

Have these things available so your child can complete this task

Ideal	Back up
Post-it notes	Coloured paper
Plain paper	
Some blocks or lego	
Dice	1-6 numeral cards or number spinner

## Why is this activity important?

This activity helps develop mathematical reasoning and communicating whilst also supporting number sense. For some students, you can emphasise one-to-one number correspondence and the use of direct comparison to describe relationships between quantities.

## Before you start

The game requires mathematical thinking and the child should be given sufficient think time during each turn.

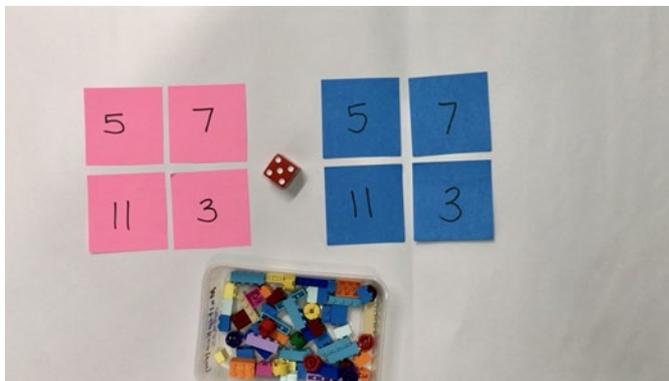
Gather the materials needed.

## What your child needs to know and do

Watch the [Building towers video](#).

## What to do next

Choose 4 numbers to build as your towers (for example, 5, 7, 11 and 3)



Take turns to roll a dice and use the number of bricks to build up your towers.

Towers can be built up in any way you choose. You can use the number of blocks rolled to build on different towers in the same turn.

Take turns to build up your towers until one player gets the exact roll to complete the last tower.

## Options for your child

Activity too hard?	Activity too easy?
<b>Decrease the number of towers you build.</b> <b>Decrease the number of blocks needed for each tower.</b>	Build the towers and play in reverse. Taking away blocks each time until there are no blocks left. Increase the number of towers you build. Increase the number of blocks needed for each tower.

## Follow-up questions to ask your child

If you play the game again, what would you do differently? Why?

How many more do you need?

What strategies are you using?

## Extension/Additional activity

Play the game in reverse, starting with the completed towers and gradually taking away blocks as you roll the dice.

[Try playing Strike it out!](#)

