

Useful websites

www.primarygamesarena.com

www.mathszone.co.uk

www.bbc.co.uk/bitesize/primary

www.math-exercises-for-kids.com

www.subtangent.com

www.primaryinteractive.co.uk/maths

www.woodlands-junior.kent.sch.uk/maths

www.primarygames.com/maths

www.primaryhomeworkhelp.co.uk/maths

www.theschoolrun.com/primary-numeracy-glossary-for-parents

<https://nrich.maths.org/10712>



Number Sense: Year 2

Number Sense: equipping students with the ability to be flexible and confident with number.

Place value lies at the heart of Number Sense. A concrete knowledge of number and its associated value has a huge impact on children's attainment as they progress through their education.

If we look at the number 45. A child with some knowledge of number will say it can be partitioned (split up) into 40 and 5. A child with greater number sense will see it as $40 + 5$, $30 + 15$, $20 + 15$ and so on.

When calculating $36 + 7$, we enable children to seek out number bonds to calculate efficiently - $36 + 4 + 3 = 40$ — as opposed to counting up on their fingers.

With a calculation like $35 + 33$, children could calculate $35 + 30 + 3 = 68$. They could also see a 'near double' of $33 + 33 = 66$ and then add 2 on. These strategies show flexibility of thought as we do not want children to always revert to the formal column method.

We teach children to explore numbers and look for patterns when calculating. The games on the following pages develop this and can easily be done at home.



Games to support the development of

'Number Sense'

High Roller

Equipment needed: Dice.

The aim of this game is to end with the highest total.

Roll 3 dice, put the highest value die to the side.

Roll the remaining 2 dice, again choosing the highest number and putting it to one side. Roll the remaining die, total the 3 dice.

Who can get the highest total?

Make 21

Equipment needed: Dice.

Roll 5 dice.

Which numbers from 1 to 21 can you make using the numbers shown on the dice?

Roll a Number

Roll a dice twice to make a number e.g. 46.

They then represent that number in as many ways as they can:

- Addition and breaking up numbers $40 + 6$. $30 + 16$, $20 + 26$
- Subtraction $50 - 4 = 46$
- What is 10 more/ 10 less?
- Which ten does it round to?
- Can you make the number with equipment? Can you draw a mathematical picture?

Five Dice

Equipment needed: Dice.

Roll five dice.

Encourage the child to subitise ('suddenly see') the numbers on the dice rather than count them as individual dots.

Using the five numbers challenge the children to make the numbers 1-15. Depending on the child's stage in learning extend to include operations $+$, $-$, \times and \div . You can use numbers more than once both in a number sentence and to make several numbers.

1 ✓	2 ✓	3 ✓ 5-2=3	4 ✓ 5-1=4	5 ✓
6 ✓	7 ✓ 5+2=7	8 ✓ 6+2=8	9 ✓ (6-2)+5	10 ✓ 2x5=
11 ✓ 6+5=11	12 ✓ 6+6=12	13 ✓ 6+6+1=13	14 ✓ 6+6+2=14	15 ✓ 6+6+2+1=15

Eg. Numbers rolled 6, 6, 5, 2, 1

Over the Hill

Equipment needed: Dice, Over the Hill game board

See attached sheet for extra information.

A great game to be played in pairs or as a whole family!

