

## Kindergarten Mathematics

### **Key Instant Recall Facts**

#### **KIRFs**

To develop your child's fluency and mental maths skills, we have introduced KIRFs (Key Instant Recall Facts) throughout school. KIRFS are a way of helping your child to learn by heart, key facts and information which they need to have instant recall of.

KIRFs are designed to support the development of mental maths skills that underpin much of the maths work in our school. They are particularly useful when calculating, adding, subtracting, multiplying or dividing. They contain number facts such as number bonds and times tables and measures that need constant practise and rehearsal, so children can recall them quickly and accurately.

Instant recall of facts helps enormously with mental agility in maths lessons. When children move onto written calculations, knowing these key facts is very beneficial.

For your child to become more efficient in recalling them easily, they need to be practised frequently and for short periods of time. Each half term, children will focus on a Key Instant Recall Fact (KIRF) to practise and learn at school and at home for the half term. They are available on our school website under the maths section and each child will receive a copy to keep at home.

The KIRFs include practical ideas to assist your child in grasping the key facts and contain helpful suggestions of ways in which you could make this learning interesting and relevant. They are not designed to be a time-consuming task and can be practised anywhere – in the car, walking to school, etc.

Regular practice - <u>little and often</u> – helps children to retain these facts and keep their skills sharp.

Throughout the half term, the KIRFs will also be practised in school and your child's teacher will assess whether they have been retained.

Over their time at primary school, we believe that - if the KIRFs are developed fully - children will be more confident with number work, understand its relevance, and be able to access the curriculum much more easily. They will be able to apply what they have learnt to a wide range of problems that confront us regularly.



### Kindergarten – Autumn 1

# I can name say the numbers from 0 to 5 and back from 5 to 0 in order.

By the end of this half term, children should know the following facts. The aim is for

them to recall these facts instantly.

In order:

0, 1, 2, 3, 4, 5

And back again:

5, 4, 3, 2, I, 0

**Key Vocabulary** 

Zero

One

Twσ

Three

Four

Five

#### **Top Tips**

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don not need to practise them all at once; perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

#### Use practical resources:

- Counting objects around the home, making piles of 0, 1, 2, 3, 4 and 5, and then counting them in order to 5 and back ... use sweets, Lego, fruit, stones, leaves etc.
- Looking for numbers up to 5 around the home and when you are out and about. Can they count on or back from that number?
- Singing number songs where the numbers are going backwards, e.g. Five Little Speckled Frogs, Five Green Bottles etc.



### Kindergarten – Autumn 2

## I can count groups of objects reliably to 5.

By the end of this half term, children should know how to write all Kinetic Numerals 0-9 accurately, always starting at the top of the number. They should also be able to recall the number bonds to 5 facts instantly.

#### **Touch Counting**

Children will sometimes count objects more than once or miss an object out that needs to be counted. Encourage your child to line up objects and touch each one as they count saying one number per object. This will also help to avoid children counting more quickly than they touch the objects, which again shows that they have not yet grasped

one-to-one correspondence.

#### **Top Tips**

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don not need to practise them all at once; perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

#### **Use practical resources:**

 Use items around the house to find different ways of counting 5, e.g. Lego, cars, conkers, shells, leaves, dolls, pencils, pasta, fruit etc. Count the steps as you go up and down touching them with your feet.



### Kindergarten – Spring 1

I can say the numbers from 0 to 10 and back from 10 to 0 in order.

By the end of this half term, children should know the following facts. The aim is for

them to recall these facts instantly.

### In order:

0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

And back again:

10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0

### **Key Vocabulary**

Zero Six

One Seven

Two Eight

Three Nine

Four Ten

Five

#### **Top Tips**

The secret to success is practising little and often.

Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don not need to practise them all at once; perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

#### **Use practical resources:**

- Make a number treasure hunt around the house or garden
- Play hopscotch and count as you jump forward
- Count the steps as you go up and down the stairs
- Thread pasta; count to 10 as you thread them on and count back as you take them off.

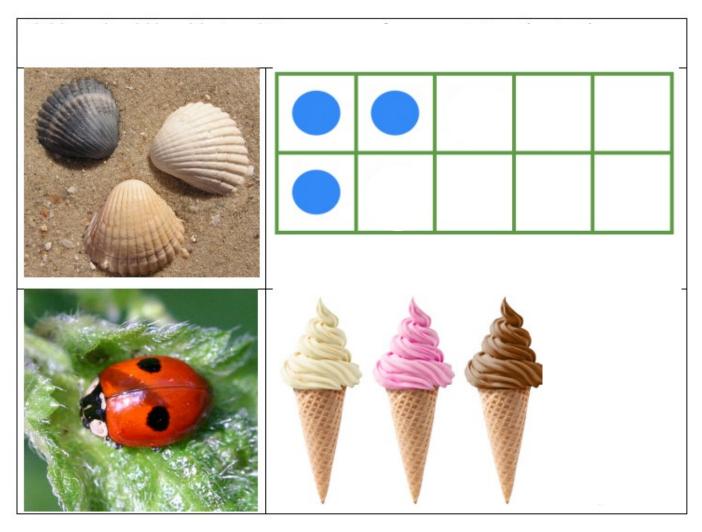


## Kindergarten – Spring 2

## ${\bf I}$ can recognise quantities without counting up to 3 (subitise).

By the end of this half term, children should be able to recognise a small group of objects (up to 3) without the need to count them.

The ability to recognise the amount of objects instantly without needing to count is called subitising.



#### **Top Tips**

The secret to success is practising little and often.

**Real-life objects** - show your child a small group of objects. Ask them how many there are without counting, then get them to check.

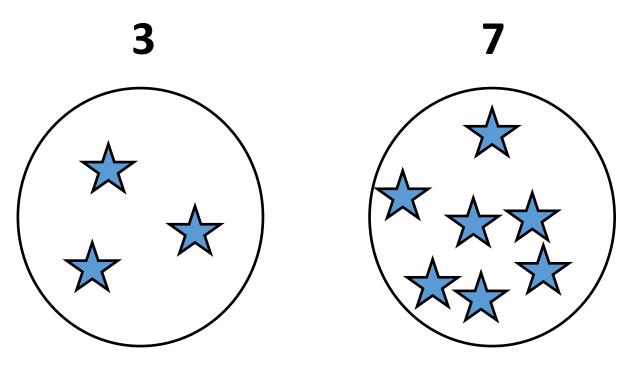
Online games: (https://www.topmarks.co.uk/learning-to-count/ladybird-spots) Put dots on the ladybird. How many are there?



### Kindergarten – Summer 1

## ${f I}$ can sort objects into groups and say which group is more and

By the end of this half term, children should be able to compare the size of the two groups



#### **Top Tips**

The secret to success is practising little and often. You can use lots of different objects to investigate which group is more or less or the same. Useful objects you might have around the home include: toy cars, pasta pieces, shells, leaves, pine cones, conkers, lego pieces, counters, sweets etc

Give your child experiences where they can compare collections and begin to talk about which group has more things. Initially, the groups need to be very obviously different, with one group having a widely different number of things. Children need the opportunity to see that groups could consist of equal numbers of things. Children can check that groups are equal, by matching objects on a one-to-one basis.

Ask children to convert two unequal groups into two that have the same number, e.g. 'There are 6 apples in one bag and 2 in another bag; can we make the bags equal for the two hungry horses?'

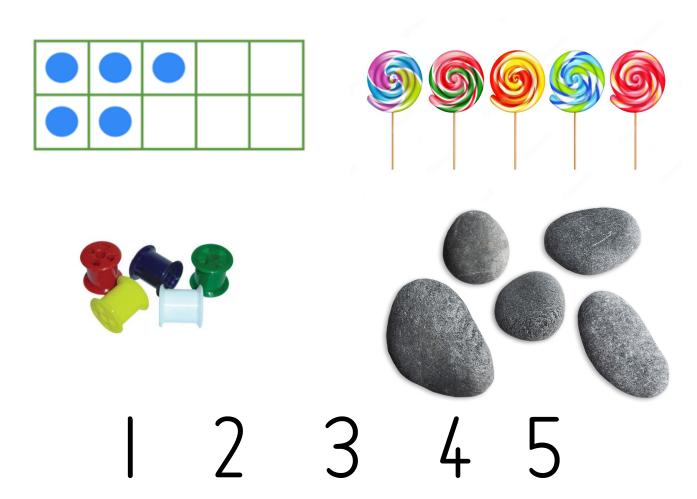
Once your child is really confident, provide some challenges: Include more small things and fewer large things, to draw attention to the quantity of objects rather the size of them., which often confuses young children.



### Kindergarten – Summer 2

## ${\bf I}$ can recognise and match numerals and quantities up to ${\bf 5}.$

By the end of this half term, children should be able to recognise and match a small group of objects (up to 5) with the corresponding numerals.



#### **Top Tips**

The secret to success is practising little and often.

**Real-life objects** - show your child a small group of objects. Ask them to count how many there are then get them to match the number of objects to a number card.

Hold up different numbers of fingers (up to 5) ask your child to match the number to a numeral card.

Online games: (https://www.topmarks.co.uk/learning-to-count/ladybird-spots) Put dots on the ladybird. How many are there?