

## Multiplication Workshop

Year 1 and Year 2

8.1.20

### What will my child learn?

#### Year 1

- Count in steps of 2, 5 and 10
- Use concrete objects and pictorial representations to solve simple multiplication and division problems

#### Year 2

- Count in steps of 2, 3, 5 and 10
- Know multiplication and division facts for 2, 5 and 10

### What will my child learn?

- 1) Counting in steps of a number.
- 2) Understanding and finding answers to multiplication questions.
- 3) Recalling multiplication facts.

It is important that children are able to do all of these things.



### Understanding problems



"We have got four people in our family and for dinner tonight everyone needs 10 tomatoes. How many tomatoes do we need altogether?"

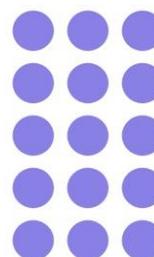
### Understanding problems



"Sally wants to know how many stickers she has collected. She has filled up six pages of her scrapbook and on each page there are five stickers. How many does she have?"

### Arrays

- Arrangement of dots in rows and columns
- Visual
- Links practical and pictorial
- Aids understanding
- Enables pupils to practise counting in steps
- Shows connections between facts

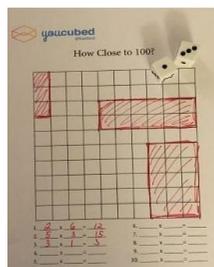


## Arrays in the environment

- o Talk about arrays whenever you see them
- o Which numbers are involved?
- o What is the total?
- o Do you need to count in ones to find the answer?
- o No need to record anything; just chat about the mathematics involved!



## Playing games with arrays



### How Close To 100?

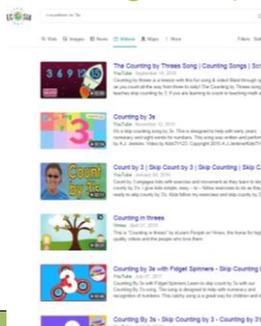
- o Print out game boards from the YouCubed website (or just use squared paper!)
- o Roll two dice to create multiplication questions.
- o Colour the arrays on the paper and fill in as many squares as you can, to see how close you can get to 100.
- o Can play together as a team or against each other on separate grids.
- o Change the numbers on one of the die for Year 1 children.

## Counting in steps of a number



- o Make cards from paper or card and write multiples of the number you are focusing on.
- o Muddle them up and ask you child to put them in order.
- o "How did you know which came first?" etc.
- o "What patterns can you see?"
- o Use to practise counting in steps of the number.

## Counting in steps of a number



- o YouTube videos: 'counting in ....'
- o Songs (YouTube or ones you've made up yourself!)

## Counting in steps of a number



- o Use a number line to jump along in steps of the given number.
- o A double number line can also be useful to start making the link to multiplication facts.

## Counting in steps of a number



Talk about patterns. "What do you notice about the numbers you say when you count in 5s? Can you use this to predict which other numbers you might say if you continued counting in this way?" (Reasoning)

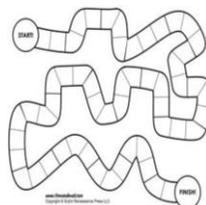
## Learning facts



### Matching cards

- Quick and easy to make; use the 'counting in steps' cards and make some question cards to match.
- Ask your child to match the question cards to the answer cards by counting in steps of the given number.
- Talk about each one and ask how they knew the answer.
- Ask them to draw a picture to match some of the calculations.
- Challenge them to match the cards a bit faster the next time they try.

## Learning facts



### Board games

- Draw a track, draw a line through the middle to make two tracks, and divide into sections.
- Take it in turns to roll a die but do not move forward until you have answered a question which has been asked by the other player.
- Move a counter or colour sections in as you move along the track.
- The first to get to the end of their track wins!

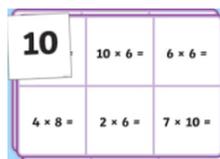
## Learning facts



### Maths Rockx

- App costs £9.99
- Multiplication facts are set to pop songs.
- Useful for car journeys or background music at home.

## Developing Speed



### Bingo

- Write eight answers for the multiplication table you are focusing on.
- Use question cards and turn over one at a time.
- Whoever calls out the answer first can place it on their board if they need that number.
- You can also play in reverse, so that everyone writes the questions on their boards and the answer cards are turned over.

## Developing Speed



### Hit The Button

- Can be accessed for free on the internet, or the app can be downloaded for £2.99.
- Allows you to set which table(s) you want your child to practise.
- Your child has to answer as many questions as they can in one minute.
- Your child then tries to beat their own score.

## Developing Speed



### Answering multiplication questions

- Cut paper into strips on one side.
- Write a series of multiplication questions for the table your child is focusing on.
- Ask your child to check each of their answers.
- See if they can beat you!

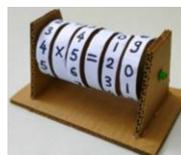
## Developing Speed



### Playing teachers

- Your child writes a series of multiplication questions for you to answer.
- You answer the questions but deliberately get a couple wrong.
- Your child marks your work in a different colour pen and has to explain the mistakes you made.

## Have fun and offer encouragement



- "You got 16 out of 20 in your test? Well done!"
- "Let's have a look together at the ones which were wrong and think about how we can learn them together."
- "I see the ones you found hard were 5x7, 7x5, 9x5 and 5x9. What do you notice about these? What would help you to learn them?"

WHEN THE **FUN** STOPS **STOP**

