

### Numeracy Volunteers

# Lesson Plan: Maths in the Real World

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### **Class teacher delivered and volunteer supported lesson**

This lesson supports children to explore the maths that's needed for jobs and hobbies in life beyond school. It will help them see the value of learning maths and understand how what they learn in school relates to everyday life.

If parents/carers are attending, the activity also aims to engage them in their children's maths learning, support positive conversations about maths between parents and children and help to build a partnership between schools and families to support children's learning.

We suggest that this lesson takes 50 – 60 minutes. Please use the slide deck to guide you through the lesson.

### Main Activity: Set Up

You will need

- 5 or 6 large pieces of paper or poster paper
- Copies of each character sheet with their job and hobby on (you could print them from the slide deck)
- Marker pens and coloured pencils
- Hints and tips page below one per group facilitator
- Reflective activity worksheets one per child
- Parent and carer handouts (if they are attending)
- A laptop and screen to display the slides

To set up the activity, place one big sheet of paper and one character on to each table. Divide the children in to 5 or 6 table groups.

### **Main Activity: Delivery**

Use the slides to guide you through the lesson. Start by introducing the aims of the session. Then invite the volunteers to introduce themselves. They will tell the class briefly about their job and a hobby they have outside of work, and where they use maths in their job and hobby. The children can ask questions about the volunteer's job or hobby (they don't have to be all maths related!).

Depending on the children's own experiences, you may wish to spend some time discussing what the jobs and hobbies on the character sheets involve. There are job profiles below and on the slides that will help with this.

Each group starts with their character and has 5 minutes to write on the big sheet how they think that character uses maths in their job and hobby. When time is up, move the characters round to the next group and repeat the activity. Each group should use the same big sheet for all characters so they don't see what the other groups have said.

Throughout the carousel, volunteers, teachers or teaching assistants and parents facilitate at the tables using the hints and tips questions. During the session the teacher or volunteer could hold up each poster and go through the ideas that have been added. Or the teacher can ask the children for ideas for each character as part of a class discussion. The posters could also be displayed on the wall for the class to look at. Do as many or as few of the characters as you wish and time allows.

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Alternatively the whole class could look at the same character at the same time, in their groups, displaying them on the screen in turn, with class discussion after each character.

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Remember that maths is more than just adding up and taking away. Anywhere you find numbers and data, you will probably find maths too. There are many potential answers for each character, but here are a few examples of how nearly all of us use maths in our daily lives. Think about how each character might use them in their job and hobby.

Working with time	Do they need to plan journeys, meet deadlines, arrive on time or use timetables or schedules to manage appointments?	
Using money	Do they need to pay for things or make decisions with their money?	
Understanding data and statistics	Do they need to read any information using numbers to complete their tasks? Will there be graphs or charts involved? Do they need to understand the probability of something happening? Do they need to record information? Do they need to use this information to make the best decisions?	
Using measurements	Do they need to measure things? Do they need to understand proportion, size, ratio and scale? Will they need to convert units of measurements?	
Working with shapes	h shapes Do they need to understand the size or dimensions of different shapes? Or use patterns for designs?	
Making calculations	Do things need to be added, subtracted, multiplied or divided? Would it be useful for the person to understand the numbers as a fraction or percentage?	

## What are the children learning in maths at the moment? How does this relate to the jobs and hobbies?

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### Individual reflective activity

ting on with numbers	Name:
	Maths in My World
Tell us about a ho	obby or something you do regularly and how it involves using maths?
with friends or fam	2 - baking, shopping, getting to school, going on a day ou nily or playing a sport. Think about things like measuring g the time, counting money, reading a bus timetable.
Design a poster to sh	ow your activity and how you use maths.
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Following the carousel activity, children are asked to complete the individual reflective activity 'Maths in My World' about their own hobby or something they do regularly and how they might use maths in these. This could be given out as homework if lesson time is limited.

#### **Parents or Carers**

If parents and carers are attending, please give them a handout to take away.

### **Our Characters**

Choose five or all six, depending on the number of groups and tables you have in the classroom. We will let you know the job title and hobby of your real-life volunteer characters prior to the session.

Name	Job	Hobby	What does the job involve?
Jamie	Nurse	Baking	<ul> <li>Cares for people suffering from illnesses and injuries</li> <li>Checks and gives medicines</li> <li>Helping with x-rays and blood tests</li> <li>Watching and writing down the patient's progress</li> </ul>
Sid	Fashion Designer	DIY	<ul> <li>Researching current fashion trends</li> <li>Developing designs for new products</li> <li>Selecting fabrics, patterns and colours</li> <li>Creating original clothing, accessories and footwear</li> <li>Selling to suppliers</li> </ul>
Maryam	Weather Forecaster	Painting	<ul> <li>Studying the weather and climate</li> <li>Collecting data from the land, sea and atmosphere</li> <li>Forecasting the weather</li> </ul>

### **Our Characters - continued**



Name	Job	Hobby	What does the job involve?
Mei	Video Game Designer	Hosting Dinner Parties	<ul> <li>Produces exciting new games</li> <li>Designs games for different consoles</li> <li>Considers and plans in detail every element of a new game</li> </ul>
Monica	Builder	Watching Football	<ul> <li>Constructs, maintains, repairs and renovates buildings</li> <li>Follows rules to make sure buildings are safe</li> <li>Makes sure walls are built straight across to ensure they are level and stable</li> <li>Installs electricity, water and gas connections</li> </ul>
Michael	Hairdresser	Board Games	<ul> <li>Manages hair appointments</li> <li>Shampoos, cuts, colours and styles hair</li> <li>Talks to the customer about what style they want</li> <li>Recommends hair products to customers</li> </ul>

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