

# 3-6: REMOTE MATHS

EDITION 6

## FRACTIONS: MODELLING, COMPARING AND INVESTIGATING

**Mathematical language:** Share, equal parts, half, eights, quarters, fourths, tenth, third, equivalent, common denominator.

### TASK 1: FLAGS

Flags across the world are often bold colours covering the flags in fractional parts. Create some flags that are  $\frac{3}{4}$  red and  $\frac{1}{4}$  yellow. This table may help you:




### TASK 2: FRACTIONS WITH FOOD

There are many fun ways to explore fractions with food! Try either of the games below to see how you can use your knowledge of fractions to make sushi or pizza.

- Sushi fraction <https://mrnussbaum.com/sushi-fractions-online-game>
- Pizza Fractions <https://mrnussbaum.com/tony-fraction-s-pizza-shop-online-game>

### TASK 3: FRACTIONS ON A NUMBER LINE

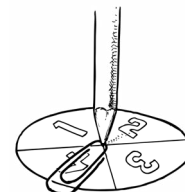
Write down five to eight fractions between  $\frac{1}{2}$  and  $\frac{3}{4}$ . Can you show these fractions on an open number line?

## EDITION 6: FRACTIONS (CONT.)

### TASK 4: THE EIGHTH OR TENTH GAME

Download and play *The Eight or The Tenth Game* from <https://drpaulswan.com.au/games/>.

- To create a handy spinner, use a paper clip and a pen/pencil.
- Want to challenge yourself a bit further? Try the *Equivalent Fraction Match Games*.

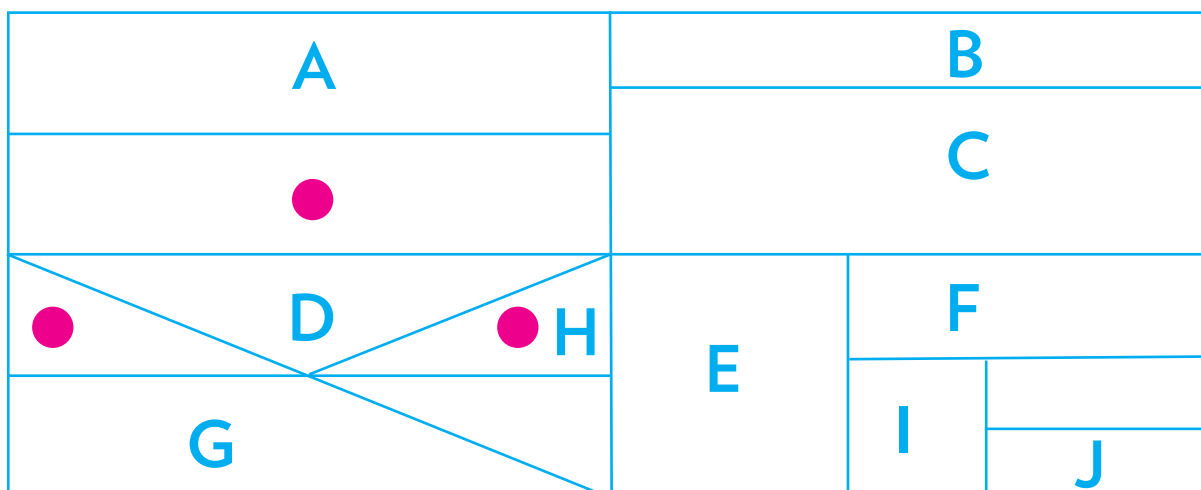


### TASK 5: RECTANGLE TANGLE *Adapted from Nrich.*

Look at this shape. It is a whole shape that has many different fractional parts of quadrilaterals and triangles. Each of the shapes is a fractional part of the large rectangle.

Can you untangle what fractional part is represented by each of the ten numbered shapes?

- What fraction is *A* of the whole shape?
- What fraction is *B + C* together?
- What fraction is all the pink dotted shapes together?
- Write some of your own questions, make sure you know the answers!



# LOCATION: INTERPRETING AND CREATING MAPS

**Mathematical language:** Compass points, grid reference, horizontal, vertical, North, South East, West, coordinates, directions, map, landmark, legend, view.

## TASK 1: FIND YOUR HOUSE ON THE MAP

Go to Google Maps, <https://www.google.com/maps/>. Can you type your home address in and find your house on a map? Click on the satellite tab to see a real-life view.

- What else do you see in the map?
- Can you find scales and legends?
- Can you see a friend's house, your school, a park you visit?
- Can you see anything unusual or interesting?

Draw a bird's eye view/aerial map of you house and the surrounding area.

Remember to include all important elements of creating a map such as:

- Simple scales
- Legends
- Grid reference
- Compass points

## TASK 2: NORTH, SOUTH, EAST, WEST

Using google maps or other resources name some landmarks or places that are North, South, East and West of your home. You may like to display your findings on a chart.

North	East	West	South

## TASK 3: ONLINE LOCATION GAMES

Try this fun primary maths game in which you mark the route for a walking track on a rainforest map.

Choose a section of track based on instructions about distances, compass directions and grid references.

Keep adding sections of track to get to the rest house.

<https://www.scottle.edu.au/ec/viewing/L352/index.html#>

**Extending prompt:** use the coordinates given in longitude and latitude to find the treasure on the map. Use the sliders to help find the correct coordinates.

[https://www.abcya.com/games/latitude\\_and\\_longitude\\_practice](https://www.abcya.com/games/latitude_and_longitude_practice)



## EDITION 6: LOCATION (CONT.)

### TASK 4: TREASURE MAP

Adapted from <https://fuse.education.vic.gov.au/MCC>

Hide an item in your garden or inside your home. Create a grid map to locate hidden treasure, like the map below. Create a route to find the treasure.

Make sure you include:

- landmarks
- coordinates and directions for the route.
- scale, for example, 2 cm : 200 m
- complex compass points as well. E.g. NE or NNE.

Test your directions and map before you give them to a family member to try. It's important that your trouble shoot to see if you need to do any debugging.

**Extending prompt:** Ask someone to hide some treasure and write directions for you to follow to find it!



### TASK 5: DRAW A GRAPH TO SUIT THIS DESCRIPTION

Research famous historical mathematician who made an impact on our world by developing our systems to help with mapping and location. You can find some very interesting information about Leonard Euler and Rene Descartes at <https://nrich.maths.org/2570>.

Write a brief report or create a PowerPoint about the system they created and how it has impacted our world.

## MATHS APP OF THE WEEK: BEE BOT



The app makes use of Bee-Bot's key functionality and enables children to improve their skills in directional language, programming sequences of forwards, backwards, left and right 90 degree turns.

Created with children in mind the app is suitable for ages 4+.

**Google Play**

<https://play.google.com/store/apps/details?id=com.wewanttoknow.Numbers>

**iOS**

<https://apps.apple.com/au/app/bee-bot/id500131639>

*Look out for more tasks next week!*