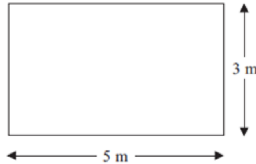





## Mr Coles' 7X1 Maths Weekly Task Grid – Week commencing 8<sup>th</sup> June

Choose **1 purple task**, **1 orange task**, **2 green tasks** and **2 yellow tasks** from the grid. Complete them this week.

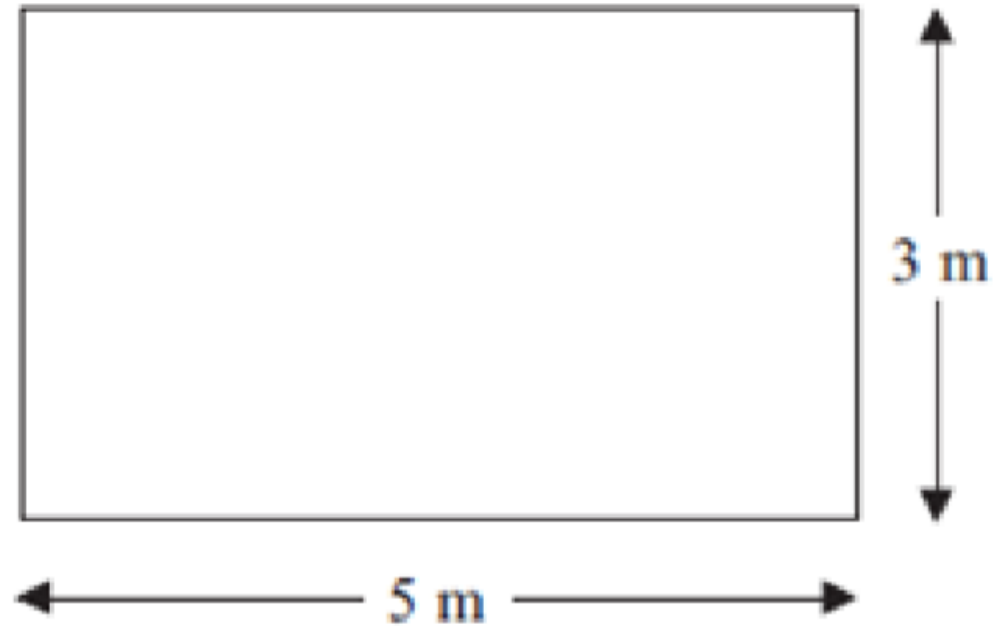
<p style="text-align: center;"><b>Task 1</b></p> <p>Improve your <a href="#">mind map</a> of all the things you <b>already know</b> about <b>Probability</b> with more things this week on <b>Frequency Trees</b>.</p> <p>When you learn something new, add it to your map.</p>	<p style="text-align: center;"><b>Task 2</b></p> <p><b>Simple Probability</b> is still set in case you need to refresh yourself on it, but now <b>Frequency Trees</b> is on there too. Make sure you do the lesson first!</p> <p style="text-align: center;"><a href="http://www.mymaths.co.uk">www.mymaths.co.uk</a></p> <p>Log on with your individual logins (email me if you can't get on). Work through both exercises or just <b>Frequency Trees</b> then attempt both homework's.</p>	<p style="text-align: center;"><b>Task 3</b></p> <p>If you need <b>Basic Probability</b> practice, then try that but if you are ok with that then the main work is <b>Frequency Trees on Corbett Maths</b>: Videos: <a href="#">Frequency Trees</a> and <a href="#">Basic Probability</a></p> <p>Questions: <a href="#">Frequency Trees</a> and <a href="#">Basic Probability</a></p> <p>Answers: <a href="#">Frequency Trees</a> and <a href="#">Basic Probability</a></p>	<p style="text-align: center;"><b>Task 4</b></p> <p>Create a poster/PowerPoint/revision cards on <b>Probability</b>.</p> <p style="text-align: center;">Website to help:</p> <p style="text-align: center;">BBC Bitesize – <a href="#">Probability</a></p> <p style="text-align: center;">BBC Bitesize – <a href="#">Frequency Trees</a></p>
<p style="text-align: center;"><b>Task 5</b></p> <p>Make a quiz/PowerPoint/Kahoot on questions involving <b>Probability and Frequency Trees</b></p> <p>Questions can involve anything to do with it. The more unique the better!</p> <p>Good ones will be featured on next week's grid.</p>	<p style="text-align: center;"><b>Task 6</b></p> <p>Make up a Frequency Tree that I can solve. It can be personal to yourself or general.</p> <p>I will feature it on next week's grid if it's tricky...</p>	<p style="text-align: center;"><b>Task 7</b></p> <p>Functional: The diagram shows Bob's bathroom wall.</p>  <p>The wall has a length of 5 m. The wall has a height of 3 m.</p> <p>Bob is going to cover the wall with tiles. He is going to use square tiles of side 25 cm.</p> <p>How many tiles will Bob have on the bathroom wall?</p> <p style="text-align: center;">Enlarged on next pages.</p>	<p style="text-align: center;"><b>Task 8</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>If you aren't sure how to do any of these, just email me. I've enlarged the questions on the next page</p> </div> <div style="border: 1px solid black; padding: 5px;"> <ol style="list-style-type: none"> <li>1) <math>3.7 \times 7.3</math></li> <li>2) Share £54 in the ratio 7:2</li> <li>3) Decrease 80 by <math>\frac{1}{4}</math></li> <li>4) <math>5 - 20 \div 10 + \sqrt{36}</math></li> <li>5) 10 pens cost 120p. How much would 15 pens cost?</li> <li>6) Expand <math>5(x - 2)</math></li> <li>7) Solve <math>5x - 3 = 12</math></li> <li>8) Factorise fully <math>6x + 12</math></li> <li>9) What is the LCM of 5 and 7</li> <li>10) <math>\frac{2}{5} + \frac{3}{7}</math></li> </ol> </div>
<p style="text-align: center;"><b>Task 9</b></p> <p>Watch this video on, er, <a href="#">licking frogs</a>.</p> <p>Have a go at the questions by pausing.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	<p style="text-align: center;"><b>Task 10</b></p> <p><b>NEW</b> Complete the Probability Mystery!</p> <p><i>Six friends enter a race. Use the following cards to determine who is most likely to win the race and with what probability. In what sequence would you expect the runners to finish the race?</i></p>  <p style="text-align: center;">Enlarged on next pages</p>	<p style="text-align: center;"><b>Task 11</b></p> <p>Problem Solving: 5 schools sent some students to a conference.</p> <p>One of the schools sent both boys and girls. This school sent 16 boys. In this school the ratio of boys to girls was 1 : 2</p> <p>The other 4 schools sent only girls. Each of the 5 schools sent the same number of students.</p> <p>Work out the total number of students sent to the conference by these 5 schools.</p> <p style="text-align: center;">Enlarged on next pages.</p>	<p style="text-align: center;"><b>Task 12</b></p> <p>Go to <a href="http://www.mrcartermaths.com">www.mrcartermaths.com</a></p> <p>Log on with the following details: U: student@stocksbridgehigh.co.uk P: Prism240</p> <p>Click on <i>secondary &gt; Statistics (on Bronze Silver Gold)</i></p> <p>And select <b>Basic Probability</b>.</p> <p>Do as many questions as you like and then check your answers.</p>

Task 7

## Functional:

The diagram shows Bob's bathroom wall.

The wall has a length of 5 m.  
The wall has a height of 3 m.



Bob is going to cover the wall with tiles.  
He is going to use square tiles of side 25 cm.

How many tiles will Bob have on the bathroom wall?

### **Task 8**

- 1)  $3.7 \times 7.3$
- 2) Share £54 in the ratio 7: 2
- 3) Decrease 80 by  $\frac{1}{4}$
- 4)  $5 - 20 \div 10 + \sqrt{36}$
- 5) 10 pens cost 120p.  
How much would 15 pens cost?
- 6) Expand  $5(x - 2)$
- 7) Solve  $5x - 3 = 12$
- 8) Factorise fully  $6x + 12$
- 9) What is the LCM of 5 and 7
- 10)  $\frac{2}{5} + \frac{3}{7}$

**Task 11**

## Problem Solving:

5 schools sent some students to a conference.

One of the schools sent both boys and girls.

This school sent 16 boys.

In this school the ratio of boys to girls was 1 : 2

The other 4 schools sent only girls.

Each of the 5 schools sent the same number of students.

Work out the total number of students sent to the conference by these 5 schools.

### Task 10

**C** is twice as likely to win as **B**.

The probability that **A** wins is equal to the sum of the probabilities that **F** or **C** win.

Two runners have a better than evens chance of winning.

Two runners have an equal but not very good chance of winning.

The probability that **C** wins is half the combined probability that **D** or **E** win.

The probability that **D** wins is half that of each of two other runners.

The chance that **C** wins is less likely than two other runners.

Runners **B**, **F** and **A** have a combined probability equal to that of certainty.

The least likely winner has a probability 0.6 smaller than the most likely winner.

Runner **A** is three times more likely to win than runner **B**.

Runner **F** has a probability of winning that is  $\frac{1}{3}$  that of runner **A**.

Each runner's probability of winning is a multiple of 0.1.

Runners **A** and **C** have a combined probability of 1.

Only one runner has a chance of winning greater than  $\frac{2}{3}$ .

Extension: What is the smallest number of cards that you need to solve the problem? Which cards do you need?

