

Thursday 26<sup>th</sup> March 2020

9.00 – 9.30	Paul Wick's P.E. lesson <a href="https://www.youtube.com/user/thebodycoach1/videos">https://www.youtube.com/user/thebodycoach1/videos</a> Water and recover!
10.00-11.00	Maths
11.00-11.30	Break
11.30 – 12.30	English
12.30 – 1.30	Lunch
1.30 – 2.30	Science
2.30 – 3.15	Free Reading Time

### Maths – L.O. To complete and mark an arithmetic test

Please complete the arithmetic test attached. There are two varieties: a **standard** one and a **challenge** one. Please only do **one** test. I will leave it up to you to decide which you do. There are mark schemes attached. Please email me if you do not understand how to answer a particular question and I can try explain it to you. **I have written a few tips under any tricky questions in the standard test.** My group, you can skip any percentage questions for now. I am thinking about how I can teach this unit to you remotely next week.

### English – L.O. To write a balanced argument

Yesterday, you completed and edited your plan ready to write! Here are the success criteria that I will be looking for in your work:

I can use paragraphs to break up ideas
I can use PEE to structure and elaborate on my points
I can use an embedded clause
I can use different sentence starts

Structure:

Introduction

Paragraph 1 - For Books

Paragraph 2 – For Books

Paragraph 3 – For Movies

Paragraph 4 – For Movies

Conclusion

If you do not finish within the hour, please do not continue past that. Tomorrow's English lesson will also be writing (or editing if you have managed to finish).

Next week, I will be setting you another piece of writing where the planning, drafting and writing will take place over one week. I am thinking that we can write a story next week!

Please scan, email, photograph your balanced argument if you can to me on Monday. I would love to see your work!

### Science – To research about aspects of light

Please research the following questions about light and create a poster/mind map/information leaflet of your findings. You can use pictures to demonstrate your findings.

#### Let's think like scientists

Use these questions to develop research skills and speaking and listening:

- Light is part of a range of waves. What do these waves look like?
- The Moon goes through phases because of a shadow. How is the shadow caused?
- Eclipses are also caused by shadows. What is causing the shadow?

#### Must-see topic websites

- [www.sciencekids.co.nz/light.html](http://www.sciencekids.co.nz/light.html) has interesting ideas and facts for children about light and different aspects of light.
- [www.learner.org/teacherslab/science/light/](http://www.learner.org/teacherslab/science/light/) has facts about light and colour – could be useful later in the unit too.
- [www.ducksters.com/science/experiment\\_light\\_travel.php](http://www.ducksters.com/science/experiment_light_travel.php) has an activity to show how light travels, that you or the children could do.

If you have time and the required equipment, then it may be nice to do this experiment. We have covered similar topics in class already so it will just be revision of understanding. It may be nice if you have younger siblings to conduct this experiment with them so that you are explaining what you know about how light travels. Ask them why the light from the torch is unable to go through the holes if it is not directly in front of them

[https://www.ducksters.com/science/experiment\\_light\\_travel.php](https://www.ducksters.com/science/experiment_light_travel.php)

Please know that there is no pressure to do the experiment. Only if you have time/equipment/desire. Doing the research page is more than enough.

Hope you are well and I miss teaching you all!

Miss Houghton

## Standard Test

### Year 6 Core Arithmetic Test 1



1	$495 + 1 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
2	$345 + 10 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
3	$82 \times 1 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
4	$\frac{1}{5}$ of 20 =	<input type="text"/>	<input type="checkbox"/> 1 mark
5	$36 \times 0 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
6	$\begin{array}{r} 5813 \\ + 1359 \\ \hline \end{array}$	<input type="text"/>	<input type="checkbox"/> 1 mark
7	$87 \div 3 =$	<input type="text"/>	<input type="checkbox"/> 1 mark

4.) Remember that  $\frac{1}{5}$  means that a block of size 20 (the whole) has been split into 5 parts. To find one of those parts you can divide 20 by the whole

8	$424 - 51 =$	<input type="text"/>	<input type="text"/> 1 mark
9	$5^2 =$	<input type="text"/>	<input type="text"/> 1 mark
10	$12 \times 5 \times 4 =$	<input type="text"/>	<input type="text"/> 1 mark
11	$729 \times 4 =$	<input type="text"/>	<input type="text"/> 1 mark
12	$5\% = \frac{?}{100}$	<input type="text"/>	<input type="text"/> 1 mark
13	$7624 - 931 - 87 =$	<input type="text"/>	<input type="text"/> 1 mark
14	$2.6 \times 10 =$	<input type="text"/>	<input type="text"/> 1 mark

9.) If a number has a little 2 above it, that means 'squared'. Essentially it means two of that number times itself i.e.  $5 \times 5$   
 $5^3$  would be  $5 \times 5 \times 5$

12.) % means out of 100

14.) Remember when you times or divide by 10, 100 or 100 you can move the decimal point.

15	$0.3 \times 3 =$	<input type="text"/>	<input type="text"/> 1 mark
16	$\frac{1}{7} = \frac{?}{21}$	<input type="text"/>	<input type="text"/> 1 mark
17	$36.4 - 27.8 =$	<input type="text"/>	<input type="text"/> 1 mark
18	15% of 90 =	<input type="text"/>	<input type="text"/> 1 mark
19	$\begin{array}{r} 729 \\ \times 54 \\ \hline \end{array}$	<input type="text"/>	<input type="text"/> 2 marks
20	$\frac{7}{9}$ of 45 =	<input type="text"/>	<input type="text"/> 1 mark
21	$221 \div 17 =$	<input type="text"/>	<input type="text"/> 2 marks

15.) Multiply as if there is no decimal place and then add the decimal place back in once you have the answer

17.) Line up the decimal points before subtracting

20.) Divide by the denominator and then multiply by the numerator

22	$23.8 \div 1000 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
23	$63.6 \times 7 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
24	$\frac{5}{6} - \frac{2}{3} =$	<input type="text"/>	<input type="checkbox"/> 1 mark
25	$0.6 = \frac{?}{20}$	<input type="text"/>	<input type="checkbox"/> 1 mark
26	$\frac{4}{7} + 2 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
27	$\frac{1}{4} \times \frac{3}{7} =$	<input type="text"/>	<input type="checkbox"/> 1 mark
28	$2\frac{1}{8} - \frac{1}{4} =$	<input type="text"/>	<input type="checkbox"/> 1 mark

22.) Move the decimal point

23.) Multiply as normal and then add the decimal place back in at the end

28.) Make the denominator the same and then turn the mixed number into a top heavy fraction before subtracting.

Mark scheme

- |     |                         |     |     |  |     |
|-----|-------------------------|-----|-----|--|-----|
| 1.  | 496                     | [1] | 19. | For 2 marks: 39 366  | [2] |
| 2.  | 355                     | [1] |     | For 1 mark:  |     |
| 3.  | 82                      | [1] |     | $\begin{array}{r} 729 \\ \times 54 \\ \hline 2916 \\ 36450 \\ \hline 39366 \end{array}$  |     |
| 4.  | 4                       | [1] |     | An error in one row, then added correctly, or an error in the addition   |     |
| 5.  | 0                       | [1] | 20. | 35   | [1] |
| 6.  | 7172                    | [1] | 21. | For 2 marks: 13  | [2] |
| 7.  | 29                      | [1] |     | For 1 mark: Evidence of either a long division method or short division method with only one error (carry figures must be seen in a short division method) |     |
| 8.  | 373                     | [1] | 22. | 0.0238   | [1] |
| 9.  | 25                      | [1] | 23. | 445.2  | [1] |
| 10. | 240                     | [1] | 24. | $\frac{1}{6}$  | [1] |
| 11. | 2916                    | [1] | 25. | 12   | [1] |
| 12. | 5                       | [1] | 26. | $\frac{2}{7}$  | [1] |
| 13. | 6606                    | [1] | 27. | $\frac{3}{28}$   | [1] |
| 14. | 26                      | [1] | 28. | $1\frac{7}{8}$   | [1] |
| 15. | 0.9                     | [1] |     |  |     |
| 16. | 3                       | [1] |     |  |     |
| 17. | 8.6                     | [1] |     |  |     |
| 18. | 13.5 or $13\frac{1}{2}$ | [1] |     |  |     |

## Challenge Test

1	$16 - 20 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
2	$236 - 30 \times 6 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
3	$368,701 + 10,000 + 10,000 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
4	$2,954 \times 9 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
5	$8,253 \div 4 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
6	$3,300 \div 30 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
7	$328,088 + 75,253 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
8	$42,000 \div 70 =$	<input type="text"/>	<input type="checkbox"/> 1 mark



9	$\frac{1}{7} \times \frac{1}{3} =$	<input type="text"/>	<input type="checkbox"/> 1 mark
10	$\begin{array}{r} 75.83 \\ \times \quad 5 \\ \hline \end{array}$	<input type="text"/>	<input type="checkbox"/> 1 mark
11	$56.97 + 8.152 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
12	$99,999 + 200 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
13	$1^3 + 2^3 + 4^2 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
14	$600 \times 40 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
15	$99,999 - 5,000 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
16	$\begin{array}{r} 636,342 \\ - 217,838 \\ \hline \end{array}$	<input type="text"/>	<input type="checkbox"/> 1 mark

17	$444,005 - ? = 22,006$	<input type="text"/>	<input type="checkbox"/> 1 mark
18	$6.3 \div 100 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
19	$0.3 \times 12 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
20	$340.27 - 3.905 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
21	$80 \times 120 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
22	$238.1 \times 1000 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
23	$50 \times 80 - 40 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
24	$8 + 7 \times 3 - 4 =$	<input type="text"/>	<input type="checkbox"/> 1 mark

25	$\begin{array}{r} 476 \\ \times 83 \\ \hline \end{array}$	<input type="text"/>	<input type="checkbox"/> 2 marks
26	$\frac{2}{3} + \frac{5}{12} =$	<input type="text"/>	<input type="checkbox"/> 1 mark
27	$\frac{5}{8} \times 9 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
28	$\begin{array}{r} 3678 \\ \times 29 \\ \hline \end{array}$	<input type="text"/>	<input type="checkbox"/> 2 marks
29	$42.3 \div 5 =$	<input type="text"/>	<input type="checkbox"/> 1 mark
30	$36 \overline{)7521} =$	<input type="text"/>	<input type="checkbox"/> 2 marks
31	$\frac{5}{4} - \frac{5}{6} =$	<input type="text"/>	<input type="checkbox"/> 1 mark
32	$5\% = \frac{?}{20}$	<input type="text"/>	<input type="checkbox"/> 1 mark

33	42% of 90 =  <input data-bbox="965 297 1174 378" type="text"/>	<input data-bbox="1286 286 1362 360" type="text"/> 1 mark
34	$\frac{6}{7} \div 2 =$  <input data-bbox="965 510 1174 591" type="text"/>	<input data-bbox="1286 499 1362 573" type="text"/> 1 mark
35	$0.6 = \frac{?}{20}$  <input data-bbox="965 723 1174 804" type="text"/>	<input data-bbox="1286 712 1362 786" type="text"/> 1 mark
36	$3\frac{1}{8} - \frac{1}{4} =$  <input data-bbox="965 947 1174 1028" type="text"/>	<input data-bbox="1286 936 1362 1010" type="text"/> 1 mark
37	$2\frac{2}{5} \times 4 =$  <input data-bbox="965 1160 1174 1240" type="text"/>	<input data-bbox="1286 1149 1362 1223" type="text"/> 1 mark

Mark scheme

- |     |  |     |     |  |     |
|-----|--|-----|-----|--|-----|
| 1.  | -4   | [1] | 21. | 9,600  | [1] |
| 2.  | 56   | [1] | 22. | 238,100  | [1] |
| 3.  | 388,701                                    | [1] | 23. | 3,960  | [1] |
| 4.  | 26,586                                     | [1] | 24. | 25   | [1] |
| 5.  | 2,063 rem 1 or equivalent<br>e.g. 2,063.25 | [1] | 25. | For 2 marks: 39,508  | [2] |
| 6.  | 110  | [1] |     | For 1 mark:  |     |
| 7.  | 403,341                                    | [1] |     | $\begin{array}{r} 476 \\ \times 83 \\ \hline 1428 \\ 38080 \\ \hline 39508 \end{array}$    |     |
| 8.  | 600  | [1] |     | <i>An error in one row, then added correctly, or an error in the addition</i>              |     |
| 9.  | $\frac{1}{21}$                             | [1] | 26. | $1\frac{1}{12}$ or equivalent  | [1] |
| 10. | 379.15                                     | [1] |     | e.g. $\frac{13}{12}$   |     |
| 11. | 65.122                                     | [1] | 27. | $5\frac{5}{8}$ or equivalent   | [1] |
| 12. | 100,199                                    | [1] |     | e.g. $\frac{45}{8}$  |     |
| 13. | 25   | [1] |     | <i>Do not accept unconventional mixed numbers e.g. <math>4\frac{13}{8}</math></i>          |     |
|     | <i>Accept <math>5^2</math></i>             |     | 28. | For 2 marks: 106,662   | [2] |
| 14. | 24,000                                     | [1] |     | For 1 mark:  |     |
| 15. | 94,999                                     | [1] |     | $\begin{array}{r} 3678 \\ \times 29 \\ \hline 33102 \\ 73560 \\ \hline 106662 \end{array}$ |     |
| 16. | 418,504                                    | [1] |     | <i>An error in one row, then added correctly, or an error in the addition</i>              |     |
| 17. | 421,999                                    | [1] | 29. | 8.46   | [1] |
| 18. | 0.063                                      | [1] |     |  |     |
| 19. | 3.6  | [1] |     |  |     |
| 20. | 336.365                                    | [1] |     |  |     |