

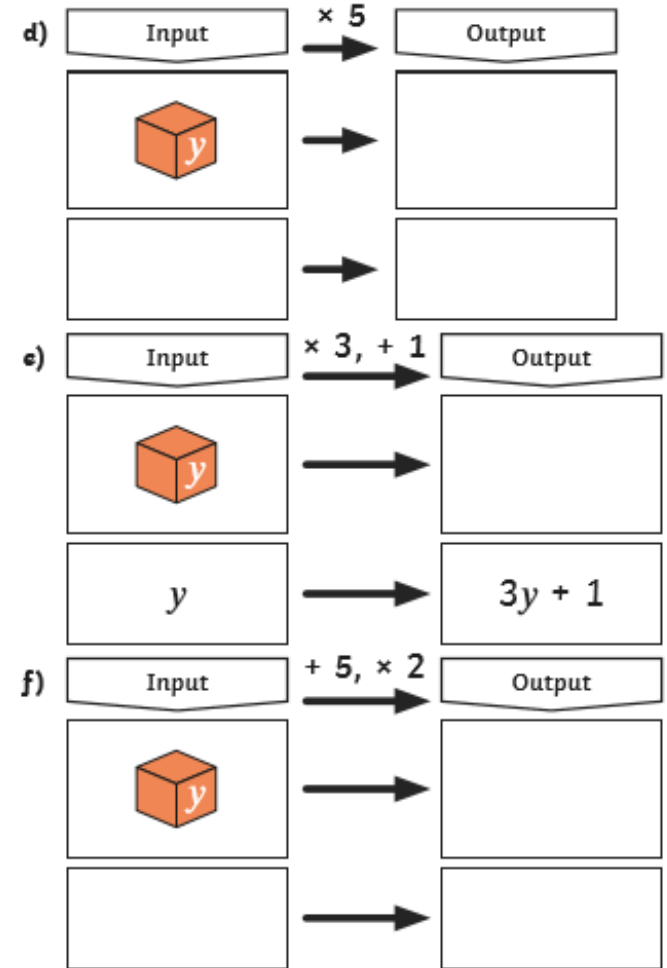
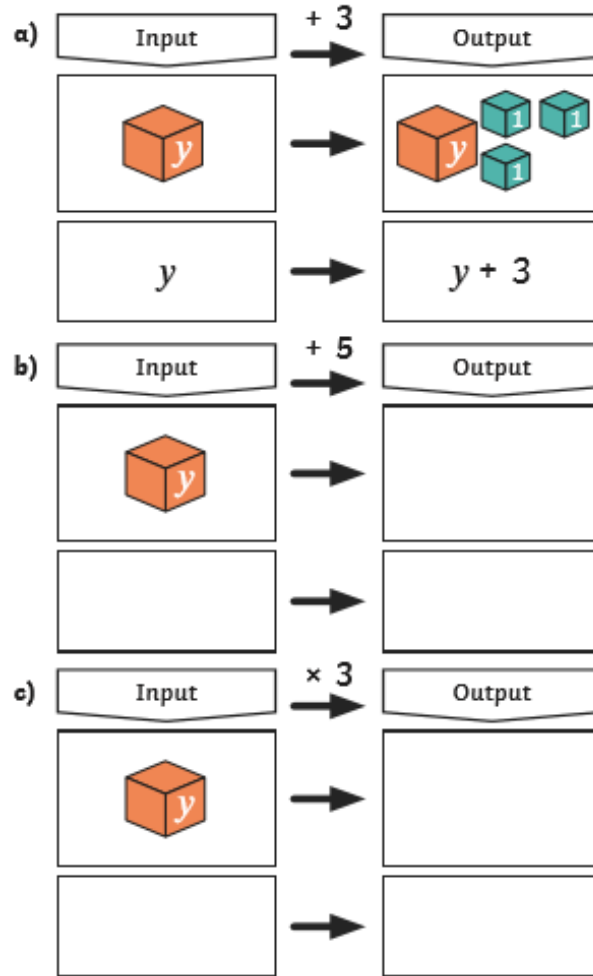
Monday 22nd June

This week, as we are preparing for secondary school, we will focus on algebra.

Some of the work in the next few days will be set out differently, so read the instructions carefully.

Before you start work, please view the powerpoint and try to answer as many of the questions on it as you can. The last question will include many possible answers. When you are ready, try the following questions.

- 1) Rhys uses cubes to write expressions for function machines. Draw the missing cubes and write the missing inputs and expressions. The first one has been completed for you.



- 1) Four children write expressions to describe their pocket money for the week. Are their expressions correct or incorrect? If an expression is incorrect, write the correct expression.



I spent half my pocket money going to the cinema. Then, I washed the car and earned £7.

$$y \div 2 + 7$$



I cleaned my bedroom and earned £4 to add to my pocket money. Then, my mum tripled my total pocket money for getting a great school report!

$$3(y + 5)$$



I spent £3 of my pocket money on a magazine. Then, I completed my paper round and earned £10

$$10(y - 3)$$



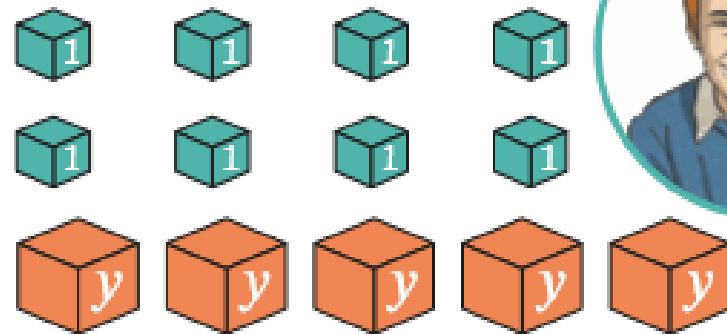
My grandpa gave me £12 to add to my pocket money. Then, I gave half of all my pocket money away to charity.

$$y + 12 - 2$$

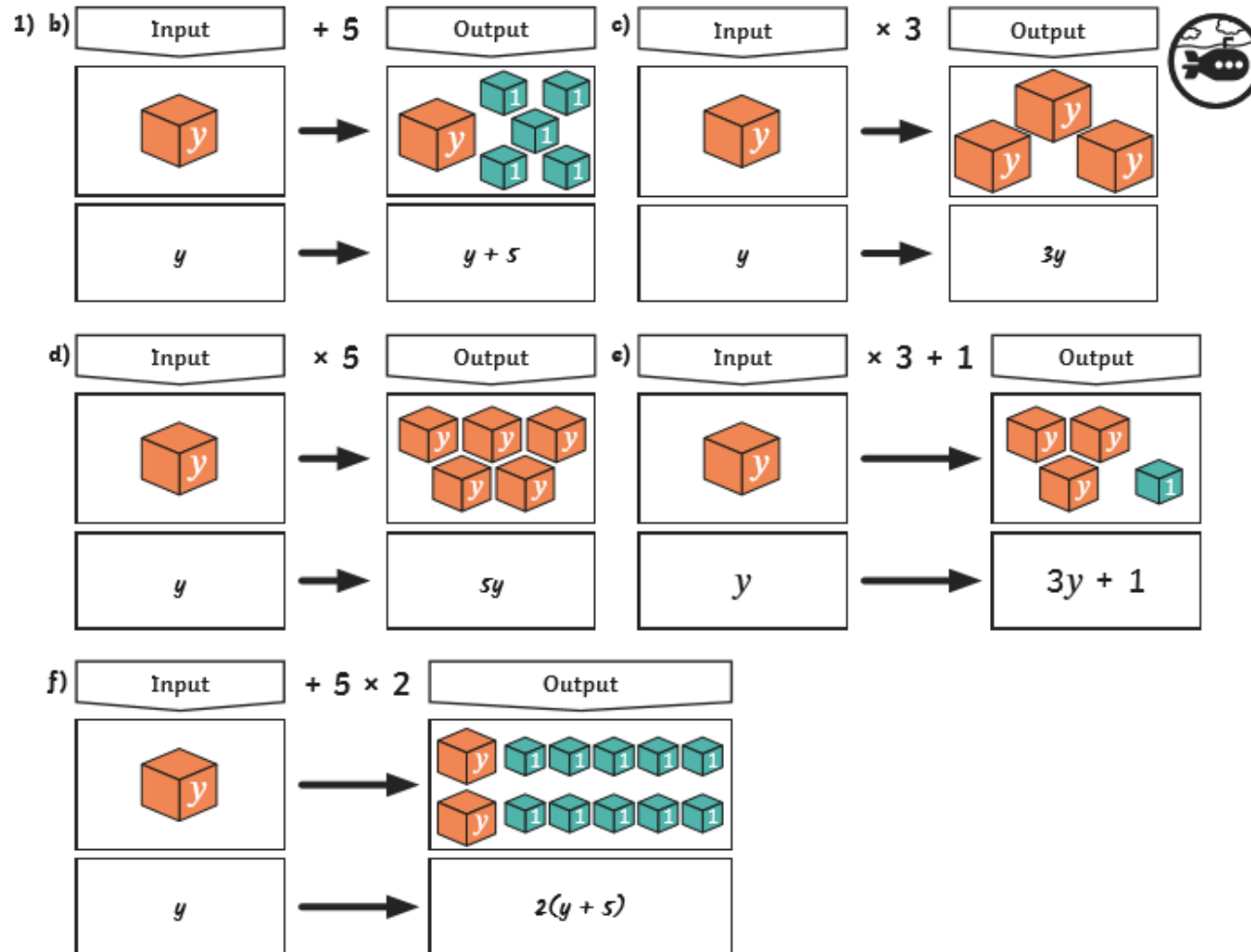
- 1) Harry is using the following cubes to form expressions.



Using any amount of the cubes, how many different expressions can you write that use addition and/or multiplication?



Answers



- 1) a) *This is correct.*
 b) *Incorrect - the correct expression is $3(y + 4)$.*
 c) *Incorrect - the correct expression is $y - 3 + 10$.*
 d) *Incorrect - the correct expression is $y + 12 \div 2$.*



| | | | | | |
|---------|----------|----------|----------|------------|-------------|
| 1) y | $y + 6$ | $2y + 8$ | $4y + 2$ | $5y + 4$ | $3(y + 2)$ |
| $2y$ | $y + 7$ | $3y + 1$ | $4y + 3$ | $5y + 5$ | $4(y + 1)$ |
| $3y$ | $y + 8$ | $3y + 2$ | $4y + 4$ | $5y + 6$ | $4(y + 2)$ |
| $4y$ | $2y + 1$ | $3y + 3$ | $4y + 5$ | $5y + 7$ | $5(y + 1)$ |
| $5y$ | $2y + 2$ | $3y + 4$ | $4y + 6$ | $5y + 8$ | $2(2y + 1)$ |
| $y + 1$ | $2y + 3$ | $3y + 5$ | $4y + 7$ | $2(y + 1)$ | $2(2y + 2)$ |
| $y + 2$ | $2y + 4$ | $3y + 6$ | $4y + 8$ | $2(y + 2)$ | $2(2y + 3)$ |
| $y + 3$ | $2y + 5$ | $3y + 7$ | $5y + 1$ | $2(y + 3)$ | $2(2y + 4)$ |
| $y + 4$ | $2y + 6$ | $3y + 8$ | $5y + 2$ | $2(y + 4)$ | |
| $y + 5$ | $2y + 7$ | $4y + 1$ | $5y + 3$ | $3(y + 1)$ | |

