Varied Fluency
Step 11: Prime Numbers

National Curriculum Objectives:

Mathematics Year 6: (6C5) Identify common factors, common multiples and prime numbers

Differentiation:

Developing Questions to support finding prime numbers within 100.
Expected Questions to support finding prime numbers within 100 including recognising the sum of two prime numbers and identifying prime factors in numbers up to 50.
Greater Depth Questions to support finding prime numbers within 100 including recognising the sum of more than two prime numbers and identifying prime factors in any 2-digit number.

More Year 6 Four Operations resources.

Did you like this resource? Don't forget to review it on our website.

© Classroom Secrets Limited 2018

Prime Numbers

1a. What are the next two prime numbers in the following sequence?

2, 3, 5, 7, ___, ___

D VF

Prime Numbers

1b. What are the next two prime numbers in the following sequence?

23, 29, 31, 37, ___, ___

D VF

2a. Which of the following numbers are not prime numbers?

17 29 14 13 21 11

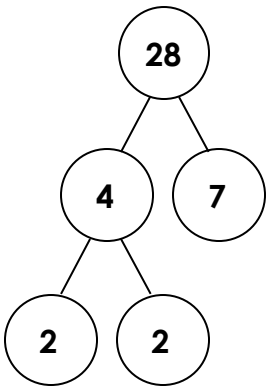
D VF

2b. Which of the following numbers are not prime numbers?

41 27 34 47 19 43

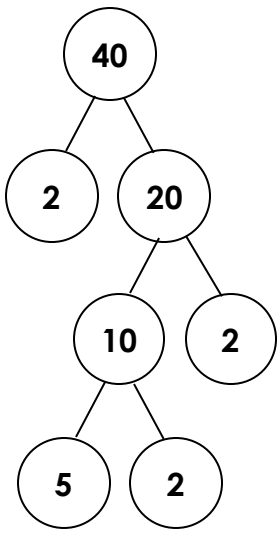
D VF

3a. Colour all the prime numbers in the part whole model.



D VF

3b. Colour all the prime factors in the factor tree.



D VF

4a. True or false?

The prime numbers before and after 31 are 27 and 35.

D VF

4b. True or false?

The prime numbers before and after 53 are 47 and 59.

D VF

© Classroom Secrets Limited 2018

Prime Numbers

5a. What is the sum of the next two prime numbers in the following sequence?

17, 19, 23, 29, ___, ___

VF

Prime Numbers

5b. What is the sum of the next two prime numbers in the following sequence?

43, 47, 53, 59, ___, ___

VF

6a. Which of the following numbers are not prime factors of 39?

2 23 3 13 5 11

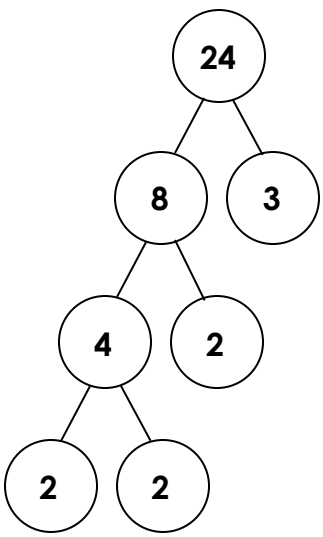
VF

6b. Which of the following numbers are not prime factors of 46?

23 4 3 29 2 7

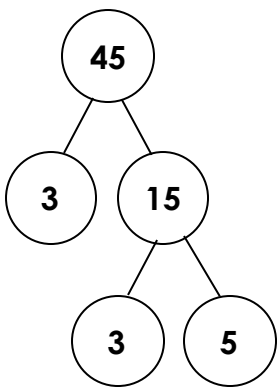
VF

7a. Colour all the prime factors in the factor tree.



VF

7b. Colour all the prime factors in the factor tree.



VF

8a. True or false?

The only prime factors of 35 are 7 and 5.

VF

8b. True or false?

The only prime factors of 48 are 2 and 4.

VF

© Classroom Secrets Limited 2018

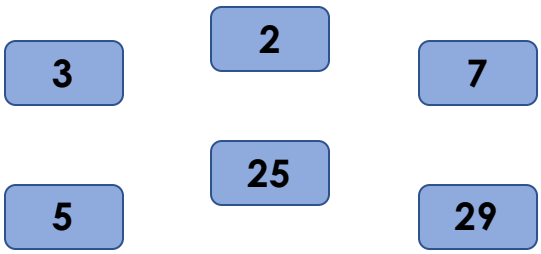
Prime Numbers

9a. What is the sum of the next three prime numbers in the following sequence?

67, 71, 73, ___, ___, ___,

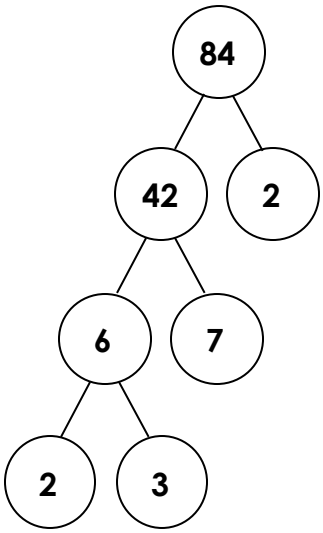
GD VF

10a. Which of the following numbers are not prime factors of 85?



GD VF

11a. Colour all the prime factors in the factor tree.



GD VF

12a. True or false?

The only prime factors of 100 are 2 and 5.

GD VF

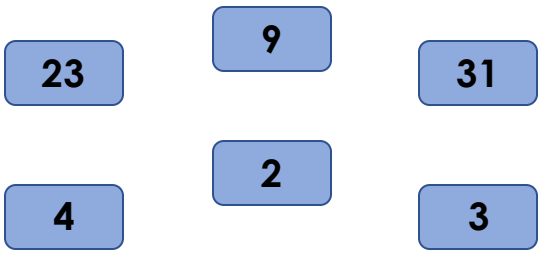
Prime Numbers

9b. What is the sum of the next three prime numbers in the following sequence?

31, 37, 41, ___, ___, ___,

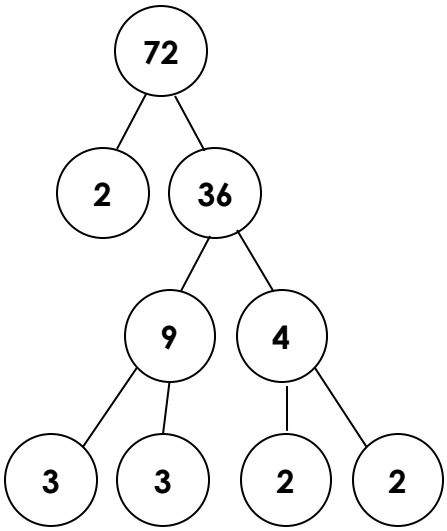
GD VF

10b. Which of the following numbers are not prime factors of 92?



GD VF

11b. Colour all the prime factors in the factor tree.



GD VF

12b. True or false?

The only prime factors of 66 are 3 and 11.

GD VF

© Classroom Secrets Limited 2018

Varied Fluency
Prime Numbers

Developing

1a. 11, 13
2a. 14 and 21
3a. Colour: 7, 2 and 2
4a. False, 29 and 37.

Expected

5a. 68
6a. 2, 5, 11, 23
7a. Colour: 3, 2, 2, 2
8a. True

Greater Depth

9a. 251
10a. 2, 3, 25, 7, 29
11a. Colour: 2, 7, 2, 3
12a. True

Varied Fluency
Prime Numbers

Developing

1b. 41, 43
2b. 27 and 34,
3b. Colour: 2, 2, 5, 2
4b. True

Expected

5b. 128
6b. 3, 4, 7, 29
7b. Colour: 3, 3, 5
8b. False, 2 and 3

Greater Depth

9b. 143
10b. 3, 4, 9, 31
11b. Colour, 2, 3, 3, 2, 2
12b. False, 2, 3 and 11

© Classroom Secrets Limited 2019