

Q3 (Carroll Diagram) Day 167 Name: _____

1. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **10** in one of the four boxes of the Carroll Diagram.

	Prime	Not Prime
Square		
Not Square		10

a) **In which box** should the pupil write the number **2**? Write **2** in the correct box.

b) **In which box** should the pupil write the number **16**? Write **16** in the correct box.

2. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **1** in one of the four boxes of the Carroll Diagram.

	Odd	Not Odd
Factor of 12	1	
Not a Factor of 12		

a) **In which box** should the pupil write the number **7**? Write **7** in the correct box.

b) **In which box** should the pupil write the number **6**? Write **6** in the correct box.

3. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **10** in one of the four boxes of the Carroll Diagram.

	Even	Not Even
Cubed		
Not Cubed	10	

a) **In which box** should the pupil write the number **8**? Write **8** in the correct box.

b) **In which box** should the pupil write the number **125**? Write **125** in the correct box.

4. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **23** in one of the four boxes of the Carroll Diagram.

	Triangular	Not Triangular
Multiple of 5		
Not a Multiple of 5		23

a) **In which box** should the pupil write the number **10**? Write **10** in the correct box.

b) **In which box** should the pupil write the number **30**? Write **30** in the correct box.

5. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **4** in one of the four boxes of the Carroll Diagram.

	Prime	Not Prime
Even		4
Not Even		

a) **In which box** should the pupil write the number **9**? Write **9** in the correct box.

b) **In which box** should the pupil write the number **2**? Write **2** in the correct box.

6. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **16** in one of the four boxes of the Carroll Diagram.

	Odd	Not Odd
Cubed		
Not Cubed		16

a) **In which box** should the pupil write the number **25**? Write **25** in the correct box.

b) **In which box** should the pupil write the number **27**? Write **27** in the correct box.

7. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **4** in one of the four boxes of the Carroll Diagram.

	Even	Not Even
Square	4	
Not Square		

a) **In which box** should the pupil write the number **27**? Write **27** in the correct box.

b) **In which box** should the pupil write the number **81**? Write **81** in the correct box.

8. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **36** in one of the four boxes of the Carroll Diagram.

	Multiple of 12	Not a Multiple of 12
Factor of 24		
Not a Factor of 24	36	

a) **In which box** should the pupil write the number **24**? Write **24** in the correct box.

b) **In which box** should the pupil write the number **7**? Write **7** in the correct box.

9. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **4** in one of the four boxes of the Carroll Diagram.

	Triangular	Not Triangular
Odd		
Not Odd		4

a) **In which box** should the pupil write the number **21**? Write **21** in the correct box.

b) **In which box** should the pupil write the number **23**? Write **23** in the correct box.

10. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **9** in one of the four boxes of the Carroll Diagram.

	Factor of 36	Not a Factor of 36
Square	9	
Not Square		

a) **In which box** should the pupil write the number **16**? Write **16** in the correct box.

b) **In which box** should the pupil write the number **18**? Write **18** in the correct box.

11. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **12** in one of the four boxes of the Carroll Diagram.

	Cubed	Not Cubed
Square		
Not Square		12

a) **In which box** should the pupil write the number **64**? Write **64** in the correct box.

b) **In which box** should the pupil write the number **16**? Write **16** in the correct box.

12. Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **34** in one of the four boxes of the Carroll Diagram.

	Prime	Not Prime
Multiple of 7		
Not a Multiple of 7		34

a) **In which box** should the pupil write the number **21** Write **21** in the correct box.

b) **In which box** should the pupil write the number **7**? Write **7** in the correct box.

Answers

- 1. 2=prime, not square / 16=not prime, square**
- 2. 7=odd, not factor / 6=not odd, factor**
- 3. 8=even, cubed / 125=not even, cubed**
- 4. 10=x5, triangular / 30=x5, not triangular**
- 5. 9=not prime, not even / 2=prime, even**
- 6. 25=odd, not cubed / 27=odd, cubed**
- 7. 27=not even, not square / 81=not even, square**
- 8. 24=x12, factor / 7=not x12, not factor**
- 9. 21=triangular, odd / 23=not triangular, odd**
- 10. 16=not factor, square / 18=factor, not square**
- 11. 64=cubed, square / 16=not cubed, square**
- 12. 21=not prime, x7 / 7=prime, x7**