



# Year 2 Mathematics

## Counting Patterns - Worksheet 3

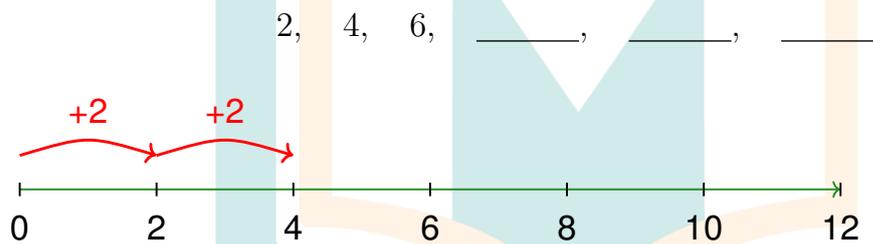
Skip Counting Forwards & Backwards

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Section 1: Skip Counting Forwards (Fluency)

Complete the skip counting patterns. Fill in the missing numbers.

**Question 1:** Count by 2s:



**Question 2:** Count by 5s:

5, 10, 15, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 3:** Count by 10s:

10, 20, 30, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 4:** Count by 3s:



3, 6, 9, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 5:** Count by 2s:

10, 12, 14, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 6:** Count by 5s:

20, 25, 30, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

### Pattern Parrot!



*Why did the parrot count by 2s? Because it wanted to be a PAIR-rot!*



## Section 2: Skip Counting Backwards (Reasoning)

Count backwards! Fill in the missing numbers.

**Question 7:** Count backwards by 10s:

90, 80, 70, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 8:** Count backwards by 2s:

20, 18, 16, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 9:** Count backwards by 5s:

50, 45, 40, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 10:** Count backwards by 3s:

18, 15, 12, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 11:** Count backwards by 10s:

100, 90, 80, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 12:** Count backwards by 2s:



30, 28, 26, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



### Jumping Kangaroo!

*What do you call a kangaroo that counts backwards? A BOOMER-ang!*





## Section 3: Start from Any Number (Challenge)

These patterns start from different numbers. Use your skip counting skills!

**Question 13:** Start at 13 and count by 10s:

13, 23, 33, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 14:** Start at 4 and count by 5s:

4, 9, 14, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 15:** Start at 7 and count by 2s:

7, 9, 11, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 16:** Start at 25 and count by 10s:

25, 35, 45, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 17:** Start at 17 and count by 3s:

17, 20, 23, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Question 18:** Start at 50 and count backwards by 5s:



50, 45, 40, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



### Super Counting Robot!

What's a robot's favourite type of music? *HEAVY METAL counting!*





# Answer Key

## Worksheet 3: Skip Counting

### Section 1: Skip Counting Forwards

1. 2, 4, 6, **8**, 10, 12
2. 5, 10, 15, **20**, **25**, 30
3. 10, 20, 30, **40**, **50**, 60
4. 3, 6, 9, **12**, **15**, 18
5. 10, 12, 14, **16**, **18**, 20
6. 20, 25, 30, **35**, **40**, 45

### Section 2: Skip Counting Backwards

7. 90, 80, 70, **60**, **50**, 40
8. 20, 18, 16, **14**, **12**, 10
9. 50, 45, 40, **35**, **30**, 25
10. 18, 15, 12, **9**, **6**, 3
11. 100, 90, 80, **70**, **60**, 50
12. 30, 28, 26, **24**, **22**, 20

### Section 3: Start from Any Number

13. 13, 23, 33, **43**, **53**, 63
14. 4, 9, 14, **19**, **24**, 29



15. 7, 9, 11, **13, 15, 17**

16. 25, 35, 45, **55, 65, 75**

17. 17, 20, 23, **26, 29, 32**

18. 50, 45, 40, **35, 30, 25**





# Year 2 Mathematics

## Counting Patterns - Worksheet 4

Finding Rules & Missing Elements

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Section 1: Find the Pattern Rule (Fluency)

Look at each pattern and describe the rule.

**Question 1:** Look at the pattern: 10, 20, 30, 40, 50  
What is the rule?

**Answer:** The rule is \_\_\_\_\_

**Question 2:** Look at the pattern: 25, 20, 15, 10, 5  
What is the rule?

**Answer:** The rule is \_\_\_\_\_

**Question 3:** Look at the pattern: 2, 4, 6, 8, 10  
What is the rule?

**Answer:** The rule is \_\_\_\_\_

**Question 4:** Look at the pattern: 100, 90, 80, 70, 60  
What is the rule?



**Answer:** The rule is \_\_\_\_\_

**Question 5:** Look at the pattern: 3, 6, 9, 12, 15  
What is the rule?

**Answer:** The rule is \_\_\_\_\_

**Question 6:** Look at the pattern: 50, 45, 40, 35, 30  
What is the rule?

**Answer:** The rule is \_\_\_\_\_

### Pattern Detective!



*Why did the detective love patterns? Because they always follow a CASE... I mean, a rule!*



## Section 2: Find the Missing Numbers (Reasoning)

Fill in the missing numbers in each pattern.

**Question 7:** Fill in the missing numbers:

12, \_\_\_\_\_, 16, 18, \_\_\_\_\_

**Question 8:** Find the missing number:

55, 60, \_\_\_\_\_, 70, 75

**Question 9:** Fill in the missing numbers:

30, \_\_\_\_\_, 50, \_\_\_\_\_, 70

**Question 10:** Find the missing number:

7, 10, 13, \_\_\_\_\_, 19

**Question 11:** Fill in the missing numbers:

\_\_\_\_\_, 8, 10, 12, \_\_\_\_\_

**Question 12:** Find the missing number:



100, 90, \_\_\_\_\_, 70, 60

**Question 13:** Fill in the missing numbers:

15, 20, \_\_\_\_\_, 30, \_\_\_\_\_



### Number Sequence Star!

*What did the missing number say when it was found? "Thanks for FILLING me in!"*



## Section 3: Visual Patterns (Challenge)

Look at the shape patterns and answer the questions.

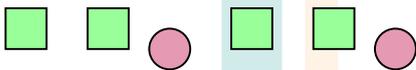
**Question 14:** Look at this pattern:



What are the next two shapes in this pattern?

**Answer:** \_\_\_\_\_

**Question 15:** Look at this pattern:



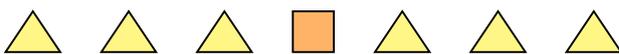
What is the rule for this pattern?

**Answer:** \_\_\_\_\_

**Question 16:** If the pattern Circle, Triangle, Circle, Triangle continues, what will the 10th shape be?

**Answer:** \_\_\_\_\_

**Question 17:** Look at this pattern:

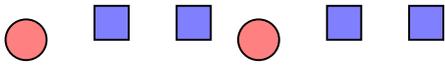


How many triangles come between each square?

**Answer:** \_\_\_\_\_ triangles



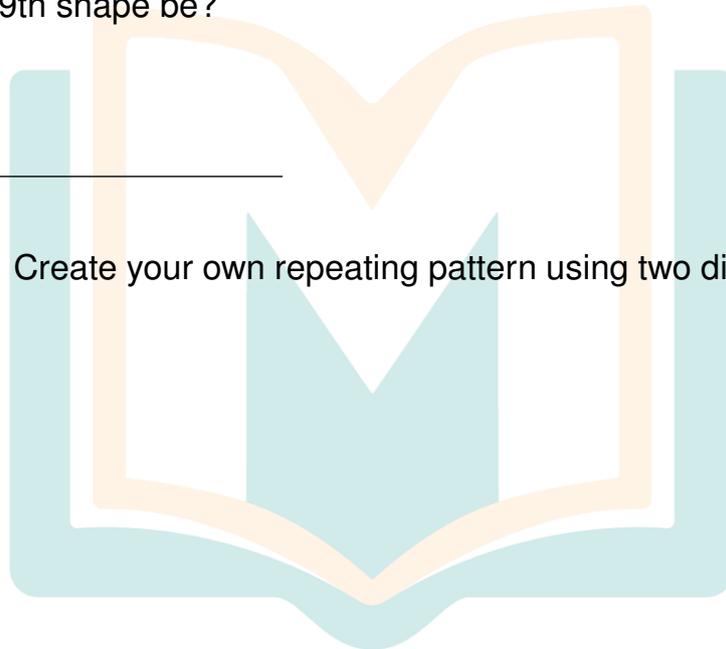
**Question 18:** Draw the next three shapes in this pattern:



**Question 19:** A pattern goes: Heart, Star, Star, Heart, Star, Star...  
What will the 9th shape be?

**Answer:** \_\_\_\_\_

**Question 20:** Create your own repeating pattern using two different shapes:



### Pattern Champion Frog!

*Why do frogs love patterns? Because they like things to go HOP, HOP, HOP in order!*



# Answer Key

## Worksheet 4: Rules & Missing Elements

### Section 1: Find the Pattern Rule

1. The rule is **Add 10** (or Count by 10s)
2. The rule is **Subtract 5** (or Count backwards by 5s)
3. The rule is **Add 2** (or Count by 2s)
4. The rule is **Subtract 10** (or Count backwards by 10s)
5. The rule is **Add 3** (or Count by 3s)
6. The rule is **Subtract 5** (or Count backwards by 5s)

### Section 2: Find the Missing Numbers

7. 12, **14**, 16, 18, **20** (Pattern: Add 2)
8. 55, 60, **65**, 70, 75 (Pattern: Add 5)
9. 30, **40**, 50, **60**, 70 (Pattern: Add 10)
10. 7, 10, 13, **16**, 19 (Pattern: Add 3)
11. **6**, 8, 10, 12, **14** (Pattern: Add 2)
12. 100, 90, **80**, 70, 60 (Pattern: Subtract 10)
13. 15, 20, **25**, 30, **35** (Pattern: Add 5)

### Section 3: Visual Patterns

14. Circle, Triangle (The pattern repeats: Circle, Triangle, Circle, Triangle...)



15. The rule is: **Square, Square, Circle** (or 2 squares then 1 circle)
16. The 10th shape will be a **Triangle** (Pattern repeats every 2: positions 2, 4, 6, 8, 10 are triangles)
17. **3 triangles** come between each square
18. The next three shapes are: **Circle, Square, Square** (Pattern: Circle, Square, Square, repeating)
19. The 9th shape will be a **Heart** (Pattern repeats every 3: Heart is at positions 1, 4, 7, and would be at 10, but 9 is Star)

*Note: Question 19 - If the pattern is Heart, Star, Star repeating, then:*

- Position 1: Heart
- Position 2: Star
- Position 3: Star
- Position 4: Heart
- Position 5: Star
- Position 6: Star
- Position 7: Heart
- Position 8: Star
- Position 9: **Star**

20. Student's own creative pattern (Accept any repeating pattern with two shapes)

**Fantastic Work, Pattern Experts!**

*You can spot patterns everywhere now!*