

## What do you need to know?

A **Letter Sequence** is a series of letters that follow a rule.

In **Letter Sequence** questions, you will be given an incomplete sequence of letters. Your job is to work out the **missing letters** in the sequence. Before you do this, you'll need to find the rule that the letters in the sequence are following!

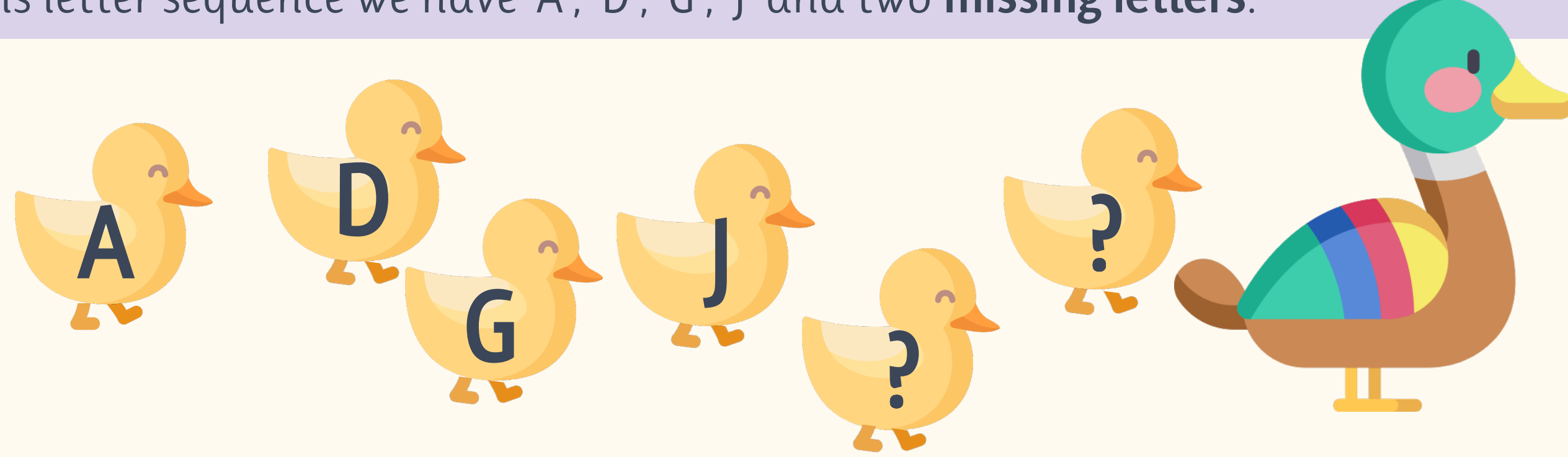
The letters in a sequence might move **forwards** or **backwards** along the alphabet!



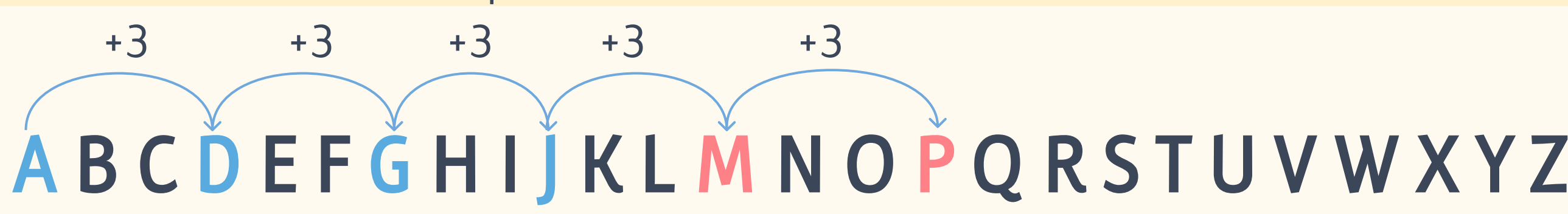
## Types of Questions:

### 1. Single Letter Sequence

In this letter sequence we have 'A', 'D', 'G', 'J' and two **missing letters**.



If we look at the alphabet, we can see that each letter moves forwards 3 places to land on the next letter in the sequence - this is our **rule**.



If we move forward 3 places from 'J', we land on 'M'. If we move along another 3 places, we land on 'P' - these are our **missing letters**!

### 2. Sequence of Letter Pairs

You will also see sequences that contain **pairs of letters**. For example:

ON, OL, OJ, OH, ---

The letters within a pair are not linked. Instead, the **first letters** of each pair are linked by a rule and the **second letters** of each pair are linked by a different rule.

In this sequence, the **first letter** of each pair always stays the same. The **second letter** of each pair moves backwards along the alphabet **2 places**.



The next letter pair in the sequence will be 'OF'!



## Key Skills:

There are some key skills that you will need for Letter Sequences questions:

### Pattern Spotting

Recognising patterns in groups of letters.

★ Think of your own rule and then apply it to any letter of the alphabet. Write out the new sequence!

### Knowing the alphabet

Knowing your alphabet and being able to count along it in order.

★ Learn the alphabet starting on any letter. We usually start at 'A' but you can challenge yourself to start at 'F', for example.

## Let's see this in action!

We need to **find the rule** → **check the rule** → **apply the rule** to complete the sequence.

Here we have an **incomplete** sequence of letter pairs:

CF, EE, GD, IC, \_\_, \_\_

Which letter pairs will complete this sequence?

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

- We are going to **split** the sequence of letter pairs into two sequences of single letters: one for the **first letters of each pair** and one for the **second letters**.

- This will help us focus on one rule at a time. The first and second letters of the pairs could follow **different rules**!

- We **apply** the rule: if we apply this rule to the first letter of the last given pair in the sequence we can find the first letters of the two missing pairs: 'I' moves forwards 2 places to 'K', and 'K' moves forwards 2 places to 'M'.

- **Remember!** The letters within a pair are **not linked**.

CF, EE, GD, IC, \_\_, \_\_

Let's start by looking at the **first letters** of the pairs to find a rule that links them. We have 'C', 'E', 'G', and 'I'.

- We **find** the rule: 'C' moves forwards 2 places to 'E'.

- We **check** the rule: 'move forwards 2 places' also applies to the rest of the sequence: 'E' moves forwards 2 places to 'G', and 'G' moves forwards 2 places to 'I'. It works!

- We **apply** the rule: if we apply this rule to the first letter of the last given pair in the sequence, we can find the first letters of the two missing pairs: 'I' moves forwards 2 places to 'K', and 'K' moves forwards 2 places to 'M'.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Now let's move onto the **second letters** of the pairs. We have 'F', 'E', 'D', and 'C'.

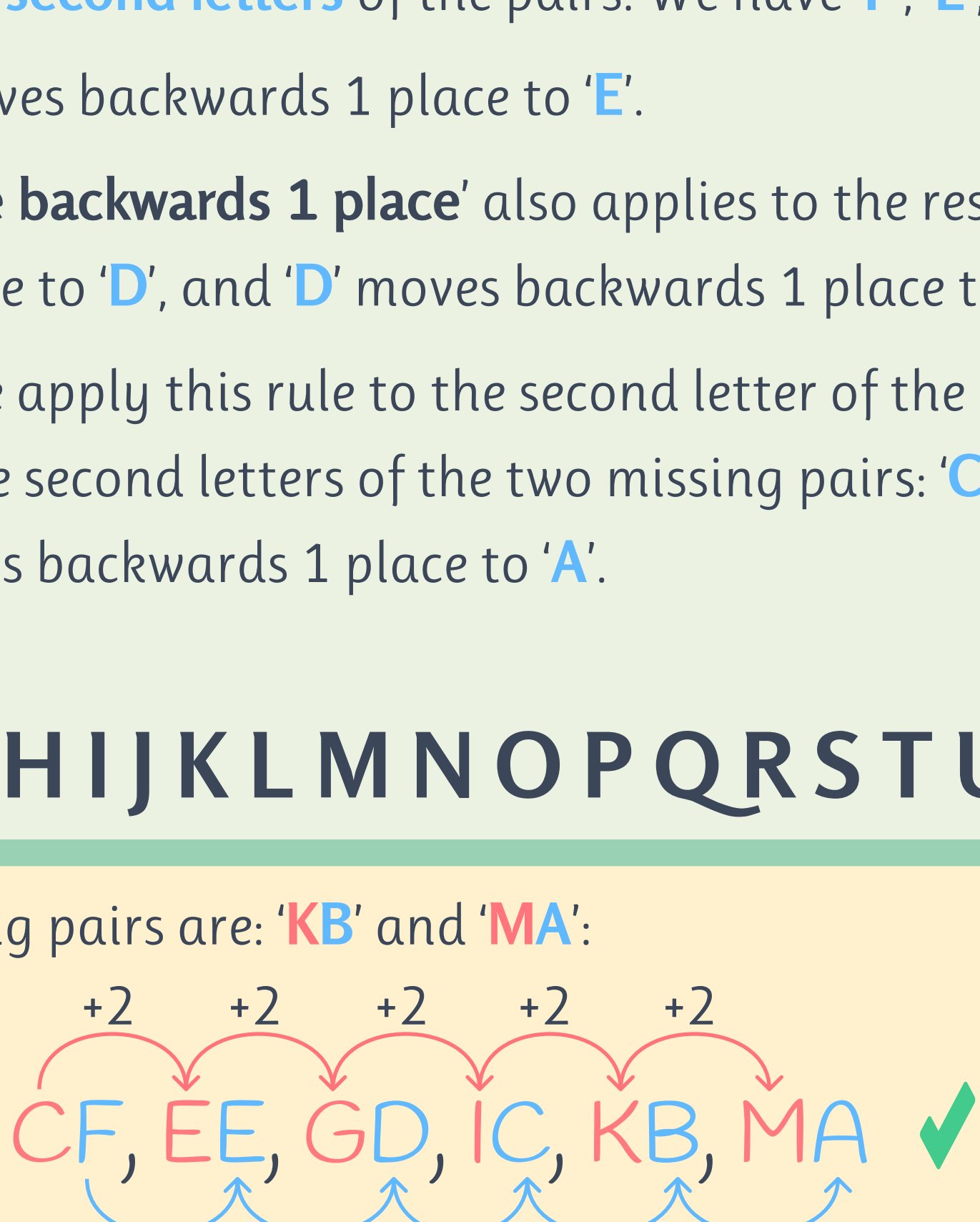
- We **find** the rule: 'F' moves backwards 1 place to 'E'.

We **check** the rule: 'move backwards 1 place' also applies to the rest of the sequence: 'E' moves backwards 1 place to 'D', and 'D' moves backwards 1 place to 'C'. It works!

- We **apply** the rule: if we apply this rule to the second letter of the last given pair in the sequence we can find the second letters of the two missing pairs: 'C' moves backwards 1 place to 'B', and 'B' moves backwards 1 place to 'A'.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Therefore the two missing pairs are: 'KB' and 'MA':



## Top tips!

- ★ Make sure you know the alphabet inside out and back to front!
- ★ Remember that letters can move **forwards** and **backwards** along the alphabet.
- ★ **Split** a sequence of letter pairs into **two sequences** of single letters! This will help you focus on each of the sequences one at a time.
- ★ If you have been given a clue, read it **carefully** so that you don't miss out on any key information.

