

Time4Maths SPC Guide

"Where mistakes turn to marks"

Estimated time to read: 10 minutes

Mistakes are **PROOF** you are **TRYING**.

Progress > Perfection

IDENTIFY THE TYPE OF MISTAKE

KNOW IT. OWN IT. FIX IT.

S	P	C
SIMPLE ERROR (Silly Mistake)	PROCESS ISSUE (Problem in Steps)	CONCEPT GAP (Concept Confused)
I understood the concept but made a careless mistake.	I knew the start, but got lost or made a mistake in the steps.	I don't fully understand the concept or how it applies.
EXAMPLES	EXAMPLES	EXAMPLES
<ul style="list-style-type: none">Misread the questionCalculation or sign errorIncorrect copyingRushed and didn't double-check	<ul style="list-style-type: none">Skipped a stepUsed the wrong formulaAlgebra or arithmetic mistake in workingDidn't follow a strategy	<ul style="list-style-type: none">Don't understand the conceptConfused between similar ideasCan't apply concept to solve the problem

Slow down & check!

Ask. Learn. Grow.

USE SPC TO IMPROVE

- 1 S - SPOT**
Re-check your work carefully. Identify what type of mistake it was.
★ AWARENESS IS POWER.
- 2 P - PLAN**
Break the problem into clear, logical steps. Plan your approach.
★ A PLAN PREVENTS PROBLEMS.
- 3 C - CORRECT**
Review the concept. Learn from the mistake and try again.
★ LEARN TODAY, OWN TOMORROW.

Plan Practice Persist Succeed

REMEMBER:

- It's okay to make mistakes.
- It's not okay to ignore them.

Top students don't avoid mistakes - **THEY CLASSIFY AND FIX THEM.**

Every student is required to bring a **hard cover A4 notebook**, as this notebook will become your personal learning guide throughout the entire year and your main revision tool before any exam. This notebook is going to be one of your most powerful tools as a student but **ONLY** if you use it properly.

The goal is simple: **help you understand concepts more clearly, remember more effectively and reduce mistakes in exams.**

The best part? **It only takes about 20 minutes each week to keep it updated.**

1. FRONT COVER (Topic Summary – Guided by your tutor)

The front of your notebook is where we build your learning **topic by topic**.

This section is **guided by your tutor during lessons**. That means your tutor will tell you exactly what to write.

- **Summarise each topic as we go**
- **Important formulas**
- **Tips & Hints**
- **Common mistakes**

💡 This is not something you guess or do alone, your tutor will clearly guide you on what to copy.

👉 **Tip:** Use highlighters and colour coding to make this section easy to revise later. When exams come, this becomes your quick revision guide.

2. BACK COVER (Growth Tracker – Your Responsibility)

This section is the engine of your improvement, and you're in the driver's seat. Each week, review your homework and tutoring notes to log any errors in the table (check last page).

Use the **SPC** code think "**Silly People Cry**" 🤪 to categorize what went wrong:

- **S (Silly):** I understood the math but rushed or made a small slip-up.
- **P (Process):** I knew the concept but missed a step or lost my way.
- **C (Concept):** I didn't grasp the content yet and need a further explanation.

3. How to Use Each Column in the SPC Table

Column 1: Topic / Chapter

This tells you **where the question is from**.

👉 Helps you track which topics you're struggling with.

Example: Algebra, Trigonometry, Calculus

Column 2: Q# (Question Number)

This shows **exactly which question you got wrong**.

👉 Makes it easy to go back and review it later.

Example: Q5, 7K-Q11

Column 3: The Question

Write the **actual question or a short version of it**.

👉 Helps you remember what type of problem it was.

Example: Solve: $4(x + 3) = 28$

Column 4: What Went Wrong

Explain your mistake in **one short sentence**.

👉 Focus on *why* you got it wrong.

Examples:

- “Forgot to distribute the 4”
 - “Mixed up formulas”
 - “Didn’t understand the concept”
-

Column 5: How to Fix It Next Time

Write **one clear action** to avoid this mistake again.

👉 This is the most important column.

Examples:

- “Draw arrows when expanding brackets”
 - “Revise this formula”
 - “Double-check calculator input”
-

Column 6: SPC Code (to IDENTIFY the mistake)

Classify your mistake:

- **S (Silly Mistake)** → Careless mistake
- **P (Process Issue)** → Steps/method problem
- **C (Concept Gap)** → lack of understanding the topic

4. Use SPC to IMPROVE (Spot – Plan – Correct)

After identifying the mistake, use SPC again to improve:

- **S – Spot** → Re-check your work and identify the mistake
- **P – Plan** → Break the solution into clear steps and plan the correct method
- **C – Correct** → Fix the concept and learn from the mistake

The goal is not just identifying mistakes but actively reducing them over time.

5. Final Reminder

SPC helps you identify mistakes **AND** improve them.

Top students don't avoid mistakes they classify and fix them.

The guide **ONLY** works if students:

- Update it weekly (it takes about 20 minutes)
- Review it regularly
- Use it before assessments and exams

Topic / Chapter	Q#	The Question	What Went Wrong	How to Fix It next time	SPC
Algebra - Chap 1	1A-Q5	Solve for x : $4(x + 3) = 28$	Distributive: I wrote $4x + 3 = 28$, forgetting to multiply the 4 by the 3.	Draw arrows from the outside term to every term inside the parentheses.	S
Time4Maths Mock Exam Term1 2026	4	Compare 0.7 and 0.09 using $<$, $>$ or $=$.	Place Value: I thought 0.09 was larger because 9 is bigger than 7.	Line up the decimal points and use placeholder zeros: 0.70 vs 0.09.	C
Geometry - Chap 5	5E-Q14	Find the volume of a cone with $r = 3$, $h = 10$.	Formula: I used the cylinder formula $V = \pi r^2 h$ and forgot the $\frac{1}{3}$.	Remember that "pointy" shapes always require multiplying by $\frac{1}{3}$.	P
Algebra - Chap 2	2D-Q3i	Simplify: $\sqrt{-49}$	Content: I wrote "no solution" instead of using imaginary numbers.	$\sqrt{-1} = i$, so the simplified answer is $7i$.	C
Trig - Chap 7	7K-Q11	Find $\cos(\theta)$ if $adj = 5$ and $hyp = 13$.	Calculation: I identified the ratio but accidentally typed $5 \div 15$ in the calculator.	Always double-check the calculator screen against your paper before hitting $=$.	S
Calculus - Chap 8	8D-Q6	Find: $\frac{d}{dx} [\sin(5x)]$	Chain Rule: I forgot to multiply by the derivative of $5x$.	Identify the "inner" function first and multiply by its derivative (5).	P

END