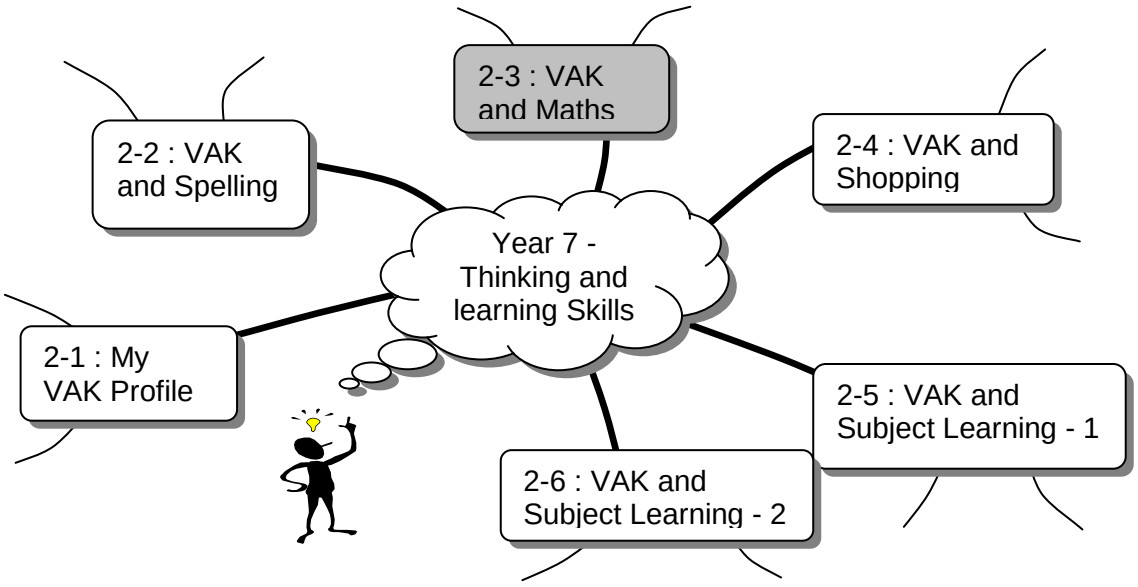
Resources... • OHP + OHTs • A3 paper, crayons, felttips • scissors maybe	**Key Words...** Visual, Auditory, Kinaesthetic, multiply, divide, fractions, graphs.....	**Thinking Skills** LS 4 LS 5

Learning outcomes : **I will be able to**…. (IWILBAT) **Homework**….	• describe V,A and K learning styles • use VAK to be brilliant at Maths Task 2.3….Use VAK skills to explain Maths computations, like multiplication and division
Entry – while students are coming in and settling **1.Starter** (5 mins) **2.Main part...** **a.** (15 min) **...Brain Break...** **b.** (20-25 min) **3. Plenary** (5 min)	• **copy....** lesson title.....aims.....key words.....Homework • **Homework**...from last lesson... ready to hand in • **3 things** from last lesson...noted in Ex. book • Brain Booster....What did we learn last lesson? • "What's in your head when I say "Six" ? **OHT 1** **Brain Break** **OHT 2** and group work...group presentations Add to the **"Big Picture"** in students' Ex. books...on A3 • **1 thing** from the lesson • What Learning can be **improved** and how will you do it? • who has **done well** in the lesson? --> merits
Homework **And next lesson**…	Reminder....Task 2.3....VAK and Maths processes VAK and Shopping

Guidance on this Lesson



Starter

Brain Booster - As usual, do one of these exercises at the start of the lesson

Lazy 8s	Double Doodle	Arm Activation	Hook Ups	Balance Buttons
"To read and write, and do well in a test, Lazy 8s is the very best."	"Links hand and eye, helps writing too, Double Doodle is the one for you."	"At any time, to relax and feel great, All you do is Arm Activate."	"It's easily done, there's no hocus pocus, Hook Ups help me to listen and focus."	"To think and remember, and do well in PE, Balance Buttons is the one for me."

Introduction

Just as with words and spelling, each student will have their own, individual, way or remembering processes in Maths, such as addition, subtraction, multiplication and division…. and also fractions, negative numbers, graphs, and so on. We can broadly classify methods as V, A or K. In **OHT 1** I give examples of how 3 students might "think through" the process, "15 + 6 = 21". The examples are deliberately extreme; to show how very different thought processes can lead to the right answer.

Students will use a mix of these, reflecting their own VAK profile, and maybe the particular task they are doing. The idea here is not that **any** strategy will do - some will be more effective than others – but that there are a variety of effective strategies, and there is no one "correct" strategy.

The purpose of this lesson, then, is to help students recognise and use their **VAK strengths**, and apply these to their Maths skills, building on the good maths practice they have been taught.

Starter

Ask the **question**: "What comes into your head when I say **SIX** ?" Note the wording gives no cues – don't ask "What do you **see?**"...or "What do you **feel?**" The answers will probably reveal a wide range of responses. Do they reflect students' VAK profiles?

Just as one question can elicit a variety of responses, so a wide range of different thought processes can lead students to the correct answer.

Main

Take students through **OHT 1**. Emphasise that these are extreme examples, but they all will work.

Ask for students' descriptions of how they would perform "15 + 6 = 21". Do their ways match their VAK profile?

Ask students for examples of other **Maths processes** where V,A, and K thinking styles could be used. **OHT 2** gives some examples to get started. I've left spaces for you to add examples of your own.

Put students in groups of 2-3.... **each group** take 1 example of 3 different Maths processes.... and design a **poster** presentation to explain how each Maths process can be done.... explaining the VAK aspects of it.

Students need to share the outcomes of this activity. This is probably best done by each **group presenting** their poster to the rest of the class.... This in itself involves elements of VAK... V - poster, A - talking, K - gestures.

There's scope for constructive discussion here. You can ask students to pick out examples of VAK strategies that suited their own Thinking style. You can go further and ask if any students have learned how to do something they previously found difficult.

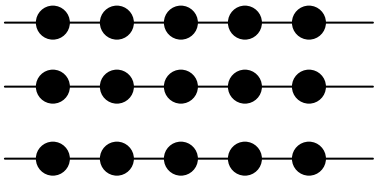
The posters can be put up in the classroom to refer to in later lessons, and as examples of work for other classes to see.

You can award **Thinking Skill LS 5** to students for their presentations in this lesson.

OHT 1 – VAK Maths

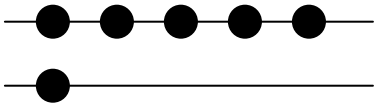
Visual

"I see 3 rows of 5...."



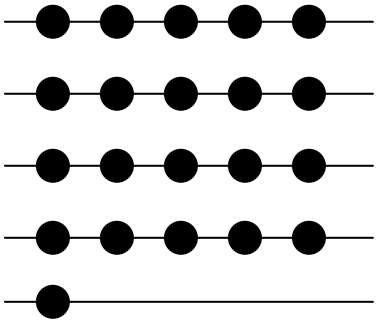
15

"...and now I see a 5 and a 1..."



6

"...so it's 4 rows of 5, and 1.... 21!"



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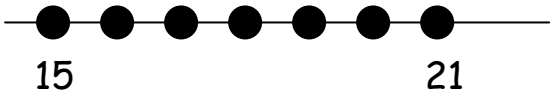
Auditory

"I'll split 15 into 10 and 5....
....and split 6 into 5 and 1....
....5 and 5 makes 10....
....so I've got 10 and 10 and 1...
....makes 21"

What's 15 and 6 ?

Kinaesthetic



Use a number line.... count on 6...
....maybe using your **fingers.**

OHT 2 – VAK Maths

Some more Maths Processes....

Process	Examples		
Add	26 + 9	8 + (-3)	
Subtract	24 – 7	6 – (- 9)	
Multiply	6 x 4	9 x 3	
Divide	12 ÷ 4	35 ÷ 7	
fractions	3/4	1/2 + 1/3	
%	75 %	40 %	