

¿Convinced?

¿Convinced? is a resource package based around the mathematics APP assessment criteria. There is one ¿Convinced? for each content-based assessment criteria from Level 4 to Level 8. As with 'Stick on the Maths' and the 'Levelopaedias', there is nothing produced directly for the Using and Applying criteria since the nature of the resources' design allows for these ongoing judgements to be contributed to. The package is so named as it is intended to provide an additional format for gathering information when building a profile of what learners can do in relation to the APP assessment criteria: is the teacher convinced that the learner understands the mathematics?

¿Convinced? has evolved from the 'formal homeworks' linked to Key Objectives of the 2001 Framework that many schools were (and are still) using. However, there are some important changes that reflect the reconceptualising of assessment and the development of APP. In particular,

- While it should not be seen as the only application of the resource package, ¿Convinced? could be used as homework sheets
- Schools could use ¿Convinced? resources (or parts of them) to support in-class work, including use in starters and plenaries
- ¿Convinced? could be used as a source of appropriate questions for peer-assessment
- The final section of each document identifies potential curricular targets linked to specific APP assessment criteria
- ¿Convinced? could be used by tutors as part of target-getting through one-to-one tuition

Please note the fact that a great deal of effort has gone into ensuring that the ¿Convinced? resources reflect the national standards carefully and demonstrate mathematical progression from one level to the next. Also, some of the documents are so complex that they do not display consistently and correctly in MS Word. For these reasons, the activities are only available as PDF files.

Each ¿Convinced? is a two-page document with features as described on the following two pages:

Assessment criteria that the resource is based on


GRAPHS AND DIAGRAMS

Name: _____

Assessment Criteria: Interpret graphs and diagrams, including pie charts, and draw conclusions

1. A class collected some data about the numbers of certain pets owned by the pupils.

a) Here is a pie chart of their results. Using at least one of the words listed below, state two conclusions that can be made using the chart.



Pets in our class

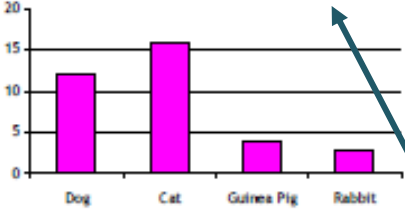
- Cat
- Dog
- Guinea Pig
- Rabbit

FRACTION *PROPORTION* *PERCENTAGE*

b) Paul says "If 6 pupils said they owned a cat then there must be 24 pupils in the class" Explain how Paul came to his conclusion.

2. A different class carried out the same survey and completed the following table and bar chart.

Pet	Frequency
Dog	8
Cat	16
Rabbit	4
Guinea Pig	3



Pets in our class

Unfortunately, there are mistakes in the bar chart. Find three errors and list them in the space on the next page.

No marks are allocated to the questions. This space can be used if marking.

L5HD6

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Assessment criteria reference:

- First two characters show level
- Letters code the assessment focus
- Number is the position in the list of assessment criteria on the assessment guidelines (A3 grid)

Questions are designed to reflect:

- the full assessment criteria in question
- the standards as exemplified in the levelopaedias
- the need to develop the process skills and assess against Using and Applying criteria

3. The chart below has been used to show data about the heights of pupils in a class. What is wrong about this choice of diagram?

Height of pupils

Height Range (η)	Frequency
130 ≤ η < 140	3
140 ≤ η < 150	12
150 ≤ η < 160	7
160 ≤ η < 170	5

Overall, I think my success level is: Low High

This final section is designed to be used as part of the reflection process after marking

An opportunity for learners to inform you how well they think they have done with the piece of work. Note that there are four boxes to encourage a decision to be made – no sitting on the fence!

Q	GRAPHS AND DIAGRAMS	<input type="radio"/>	<input type="radio"/>
	I interpret simple pie charts (when angles are not given)		
	I can interpret bar charts		
	I can choose an appropriate graph or chart for some data		
	<i>I can draw simple conclusions of my own and give an explanation of my reasoning</i>		
	<i>I can identify and obtain necessary information to carry through a task and solve mathematical problems</i>		
	I need to practise ...		

The black text indicates how the assessment criteria can be unpackaged into specific skills

The red italicised text indicates the Using and Applying criteria that have the potential to be demonstrated through the chosen questions. These have been taken from the same level as the assessment criteria on which the sheet is based.

Space for learners to comment on where they need to improve

Learners should be encouraged to identify whether or not they feel confident at each particular skill – again, only two boxes encourage a decision