

REASONING

7ER14TS

**The script for the
reasoning test**



119453



Llywodraeth Cymru
Welsh Government

Information for administrators

This booklet provides you with the script you read to learners when presenting the stimulus materials immediately prior to the National Numeracy Test (Reasoning).

The stimulus materials are a crucial element of the test as they enable learners to engage with the context of the first set of questions, and also reduce both reading demand and test anxiety.

It is **essential** therefore that you prepare in advance for the test by going through the script in detail, in conjunction with the slide presentation (on the computer disk). You **must** make sure that you understand the presentation and can then present the information with confidence. If learners do not understand, there is a significant risk of their not engaging with the test questions.

Before administering the presentation

Detailed information on administering the presentation is provided in the *Test administration guidance* that accompanies the test and in the *National Reading and Numeracy Tests – 2014 test administration handbook* on the Learning Wales website learning.wales.gov.uk

Immediately before showing the presentation to learners, check that:

- everyone can see and hear, and is focused on what you are presenting
- access arrangements have been made by the school for any learner requiring them
- the technology works.

Administering the presentation

School trials of the tests clearly show the crucial importance of the presenter in ensuring that learners engage with, and are enthusiastic about, the contexts.



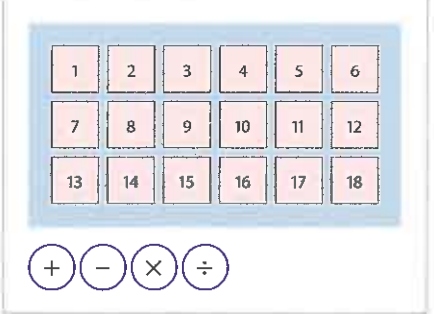
Your role therefore is of great significance to your learners, so please:

- make it interesting! To achieve the engagement and interest of learners, you, as presenter, need to be seen as confident and enjoying the materials. Use intonation and present with enthusiasm. You can (as appropriate for the age group) act out parts, use different voices or use any appropriate methodology to ensure that learners understand the contexts
- ask questions to engage learners. For example, if the context were about the rules of rugby, start by asking them who likes rugby and who knows anything about the rules. Get them involved in the context, wanting to know more
- make sure you include all the elements within the script – they are there for a good reason
- check understanding (both visually and, if necessary, by asking learners) and then expand if appropriate. However, if you do expand, you must not at any time extend discussion or commentary about the numerical content beyond that provided in the presentation, as this could help learners with the test questions. Within the script, you may be advised about issues you should not discuss (all such information is given in italics – this clearly should not be read out loud).

Learners must not be given any help that could influence their test performance.

Presentation to be shown to learners before doing question 1

The text in the right-hand boxes (but not italics) should be read to learners. You can use your own words, or provide additional explanation of contexts, if necessary. However, help should not be given with the numeracy that is to be assessed.

Slide 1		<p><i>(Keep this slide on the screen until you are ready to start the presentation.)</i></p>
Slide 2		<p>These pupils are working with their teacher to make a maths game for younger children.</p> <p>They want to make a game that is fun and challenging.</p> <p>The game they make is called 'Knock Them Out'.</p>
Slide 3		<p>The game starts with cards on a board. The cards are numbered from 1 to 18.</p> <p>You throw two dice and use them to make as many different numbers on the board as possible. You can use addition, subtraction, multiplication or division, but only one at a time.</p> <p>You must use both dice.</p>

Slide 4



For example, the dice show 5 and 3.

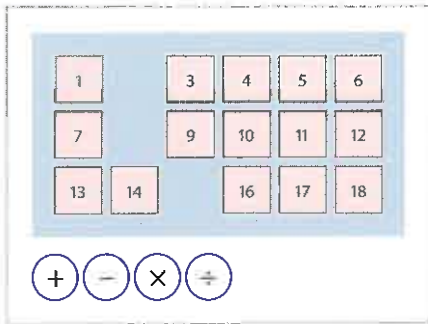
Which three cards can you knock out using 5 and 3?

(Allow discussion, and support learners to understand that they can knock out 8, 2 and 15 because $5 + 3 = 8$, $5 - 3 = 2$, and $5 \times 3 = 15$)

Why can't you use division if the dice show 5 and 3? *(Because neither $5 \div 3$ nor $3 \div 5$ is a whole number.)*

Good, the only numbers we can knock out are 8, 2 and 15 ... so the cards are knocked out like this *(show next slide)*.

Slide 5



So now these cards are left on the board.

You throw the dice again ...

Slide 6



... and this time you throw 4 and 4.

Talk with the person sitting next to you. What numbers can you knock out from the board?

(Allow discussion, then agree you can knock out 16 and 1 because $4 \times 4 = 16$ and $4 \div 4 = 1$.

If needed, explain that you cannot knock out 8 again as it has already gone and stress that both dice have to be used, i.e. you cannot knock out 4 by using just one dice.)

Now you are going to answer some questions about the Knock Them Out game.

All the information you need is in your booklet. When you have finished there are other questions to answer.

Remember that for some of the questions you will need to use your calculator, and it is very important to show your working so that someone else can understand what you are doing and why.

You have 30 minutes.