

Numeracy Professional Skills Test

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Overview of the test

- Anyone who is going into teaching must pass the numeracy and literacy skills tests
- Introduced to ensure all teachers are fully competent in numeracy (and literacy), regardless of their subject
- It is an additional requirement to the GCSE grade C equivalence entry requirement
- Set in the context of the professional role of a teacher
- To assess the use of real data and information which teachers are likely to encounter
- Delivered on computers in approved test centres

Format of the test

- 28 questions
- Overall pass mark is 18 out of 28 but it may vary depending on the difficulty of the questions
- Lasts approximately 48 minutes - can get extra time if specific arrangements have been made
- Has two sections:
 - 12 mental arithmetic questions
 - 16 written questions
- One practice question at the beginning

Some practical information

- You will be asked to place all your personal items in a locker
- Can't bring own paper for working
- Paper/whiteboard will be given for working and will be collected before you leave the room
- Multiple attempts are possible
- After a certain number of free resits, charges may apply to additional attempts

Mental arithmetic questions

- Section starts with an unscored practice question
- 12 questions each worth 1 mark
- Each question is read out twice, through headphones
- 18 seconds to give the answer in one or more answer boxes
- Returning to any questions is not possible
- The use of calculator is not allowed
- Make sure you make notes on the paper/whiteboard provided

Written questions

- 16 questions each worth 1 mark: 7 assess data and 9 assess arithmetic
- 36 minutes for the written section
- No time limit for the individual questions (allow about 2 minutes per question - don't get bogged down!)
- You can go back and forward - if you find a question too difficult, leave it and come back to it later! You can flag it to remind you!
- The use of an onscreen calculator is allowed

Test content

Mental arithmetic

- addition, subtraction, multiplication and division
- time
- fractions, decimals and percentages
- proportions involving fractions, decimals and percentages
- measurement, including money, distance, area and volume
- conversions

Interpret and use written data

- identify trends correctly
- make comparisons in order to draw conclusions
- interpret information accurately

Solve written arithmetic problems

- time
- money
- fractions, decimals and percentages
- proportion and ratio
- measurements (e.g. distance, area)
- conversions
- averages (mean, median and mode)
- range
- using simple formulae

Tip



5 point strategy

- Read/listen to the question
 - Take the numbers out from the words
 - Decide what maths is necessary
 - Do the calculations
 - Does it seem sensible?

Sample questions

In the following ten slides there are:

- 5 mental arithmetic questions (timed at 55 seconds each) and
- 5 written data and arithmetic questions (with no time set up)

Mental Arithmetic

Are you ready?

Mental Arithmetic

Question 1

In a class of 32 pupils, 4 have brown eyes.

What fraction of the class does not have brown eyes?

Give your answer in its lowest terms.

Answer: $\frac{\boxed{}}{\boxed{}}$

Mental Arithmetic

Question 2

What is two point one five multiplied by three hundred?

Answer: _____

Mental Arithmetic

Question 3

Two primary schools in the same county are 120 miles away from each other.

As an approximation, 8 kilometres is equal to 5 miles.

Using this approximation, how far in kilometres are these two schools away from each other?

Answer: _____ kilometres

Mental Arithmetic

Question 4

Last year there were 120 pupils in Year 4. This year this number increased by five percent.

How many pupils are in Year 4 this year?

Answer: _____ pupils

Mental Arithmetic

Question 5

In a year group of 140 pupils, 30% came to school on scooter or by bike. 15 pupils came by bike.

How many pupils came on scooter?

Answer: _____ pupils

Mental Arithmetic

Answers:

Q1: $\frac{7}{8}$

Q2: 645

Q3: 192 km

Q4: 126 pupils

Q5: 27 pupils

Written Data and Arithmetic

Are you ready?

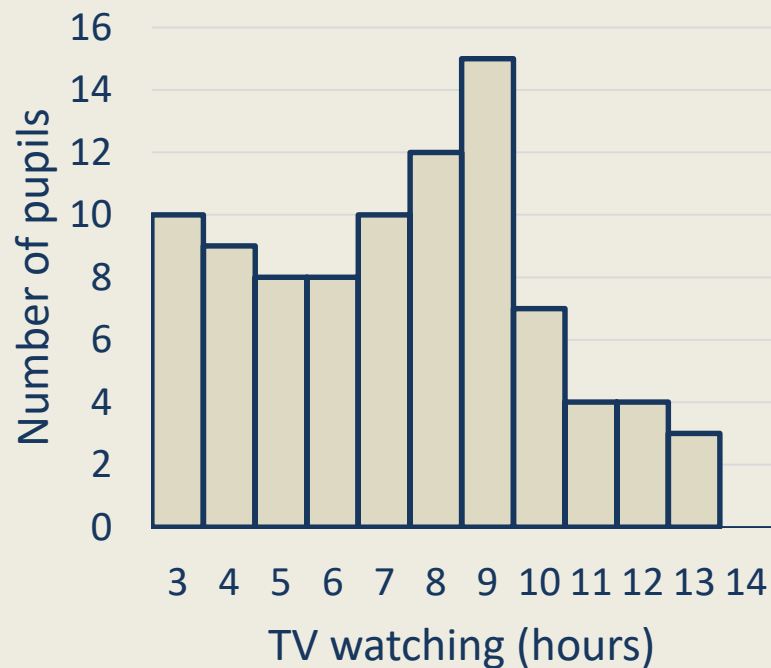
Written Data and Arithmetic

Question 6

This bar chart shows the number of hours pupils spend watching TV in a week.

How many pupils were surveyed?

Answer: _____ pupils



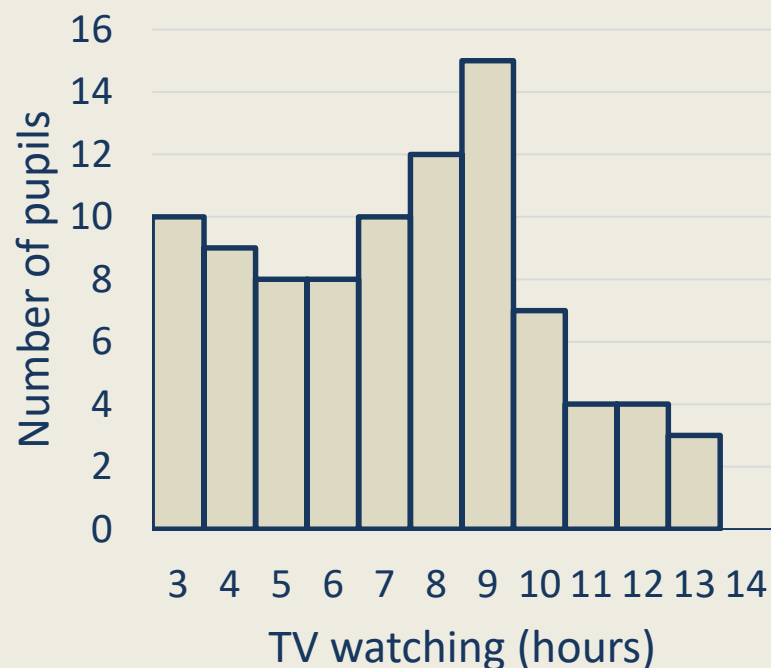
Written Data and Arithmetic

Question 7

This bar chart shows the number of hours pupils spend watching TV in a week. 90 pupils were surveyed.

What is the range of time spent on watching TV?

Answer: _____ hours



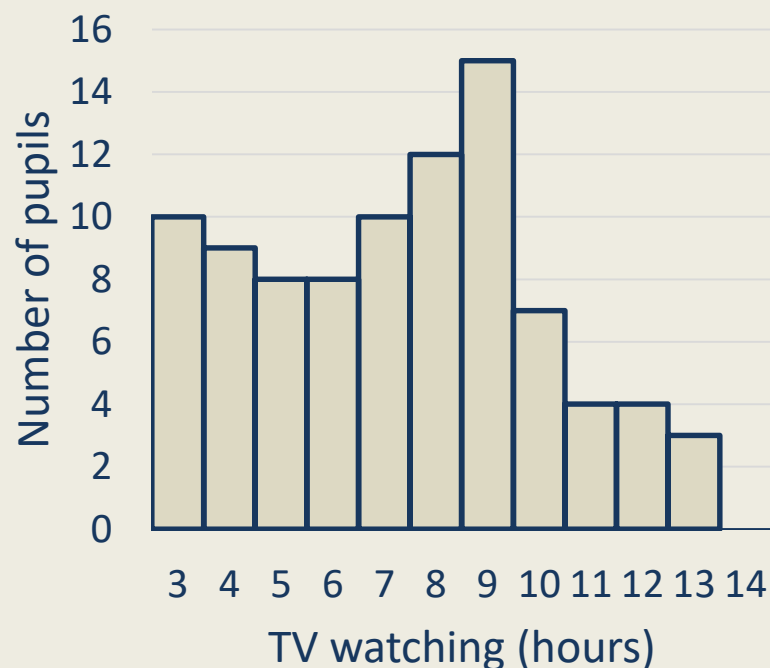
Written Data and Arithmetic

Question 8

This bar chart shows the number of hours pupils spend watching TV in a week. 90 pupils were surveyed.

What is the modal time spent on watching TV?

Answer: _____ hours



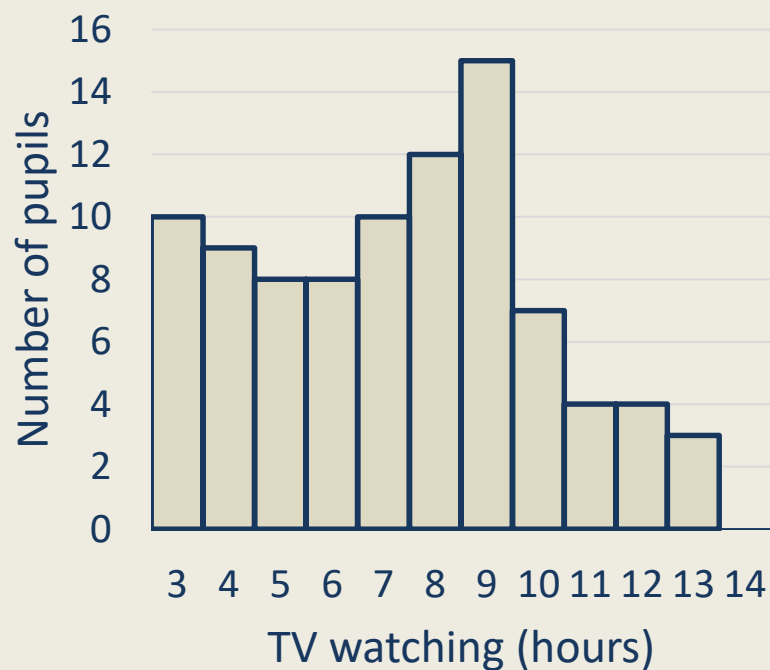
Written Data and Arithmetic

Question 9

This bar chart shows the number of hours pupils spend watching TV in a week. 90 pupils were surveyed.

What is the median time spent on watching TV?

Answer: _____ hours



Written Data and Arithmetic

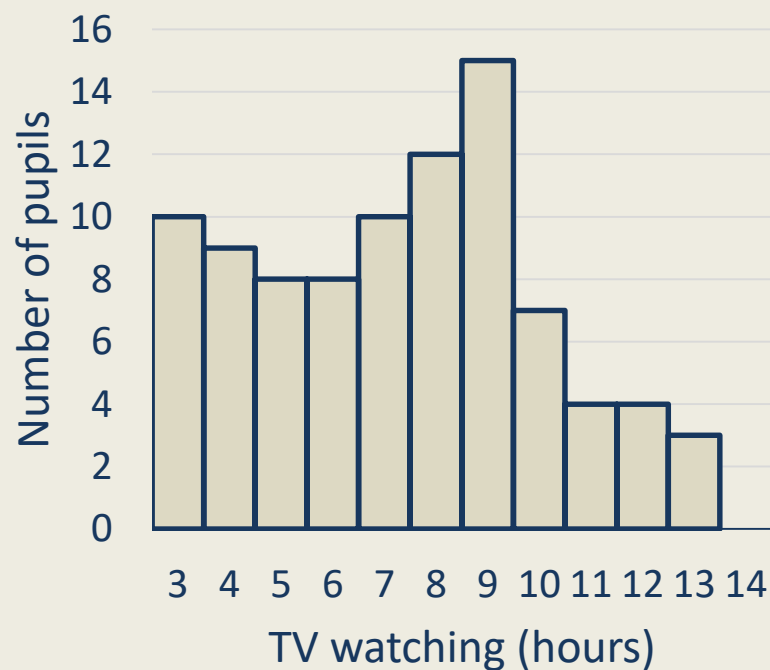
Question 10

This bar chart shows the number of hours pupils spend watching TV in a week. 90 pupils were surveyed.

What proportion of surveyed pupils spend 10 or more hours on watching TV?

Give your answer as a decimal.

Answer: _____



Written Data and Arithmetic

Answers:

Q6: 90 pupils

Q7: 10 hours

Q8: 9 hours

Q9: 7.5 hours

Q10: 0.2

Additional Information and Support

Department for Education <http://sta.education.gov.uk/>
(website with detailed information about the tests and practice tests)

‘Passing the Numeracy Skills Test’ by Mark Patmore
(book with many practice questions and worked out solutions)

mathcentre.ac.uk and khanacademy.org (two sample websites to help brush up numeracy skills)

Thank you

Any questions ? ? ?