1. You are going to hear eight short extracts in which scientists discuss their work.

a) Look at the underlined words and discuss their meaning with your partner

1. What was the dosage of fluoride per kilogram of body weight?
   a) 0.166 b) 0.16 c) 0.616

2. What was the sensitivity of the assay?
   a) 0.02 b) 2.0 c) 0.2

3. What is the output impedance at the 5V end?
   a) 0.02 b) 0.20 c) 0.92

4. What amperage of flex is used?
   a) 0.6 b) 6 c) 6.8

5. What is the temperature below which the superconductor conducts electricity with no resistance?
   a) $^{9}/_{10}$ b) 19 c) 90

6. What is the enthalpy change when 2 moles of water are formed at a pressure of one atmosphere and a temperature of 298 kelvin?
   a) -517.6 b) -5716 c) -571.6

7. What is the lowest frequency at which young mice squeak when isolated from their mother?
   a) 450 b) 45 c) 405

8. What speed laser pulses were used?
   a) 15 b) 50 c) -50

2. In pairs, decide how we say these values or symbols.

Values:

a) $^{3}/_{4}$ b) $^{5}/_{8}$ c) 10^2 d) 10^3 e) 10^7 f) 10^{-9}

Symbols:

a) % b) $\log_{10}7$ c) π d) $\sqrt{49}$ e) $\sqrt[3]{27}$

What is the difference between **1.356** and **1,356**? What are the ways of saying the numbers?

3. Fill in the gaps with the words below

plus minus divided subtracted multiplied times equals

4 + 4 = 8	four and / _____ four is / _____ eight
9 − 2 = 7	nine _____ two is seven *or* 2 _____ from nine is seven
5 × 5 = 25	five _____ five is twenty-five *or* five _____ by five is twenty-five
8 ÷ 4 = 2	eight _____ by four is two

4. Choose the correct answer.

The oil age began about (1) ***150 / one hundred and fifty*** years ago. Today oil is still the main source of energy and provides about (2) ***30% / 30 %*** of the world's total primary energy supply, while the entire set of fossil energies makes up more than (3) ***eighty per cent / 80%*** . The average American consumes (4) ***314 GJ / 314 GJs***. The energy contained in (5) **1 / one** barrel of oil is more than (6) **6 GJ / 6 GJs.** Such heat content would be generated by human muscles in about (7) **2*.5 / two and a half*** years. The average per-capita availability of all forms of energy remained low and stagnant for a very long period of time. The US consumption of fossil fuels surpassed that of biomass only in the early (8) ***1880s / 1880's*** . During the second half of the (9) ***19th / XIX*** *century*, the average per capita supply of all energy forms increased by only twenty-five (10) ***per cent / percent***. In contrast, human advances during the (11) ***20 / twentieth*** century were strongly linked with an unprecedented rise in total energy consumption.

5.

a) Complete the sentences below with ***little / a little / few /a few*** and suitable words (sometimes in plural) from (a)

1. This parcel is _____ _____ heavier than that one.
2. There were just _____ _____ of crops in the cellar. Not enough to survive that long and harsh winter.
3. As this toothpaste has only _____ _____, it can be used by small children.
4. It will only do you good if you put on _____ _____.
5. The athlete asked to have _____ _____ added.

b) Choose the right form of the verb to be or to have

- A large percentage of the older population ____ voting against her.
- Two-fifths of the troops _____ lost in the battle.
- Two-fifths of the vineyard _____destroyed by fire.
- Forty percent of the students _____in favor of changing the policy.
- Forty percent of the student body _____ in favor of changing the policy.
- More than one student _____ tried this.
- What shoe size _____ you?
- Ten dollars _____ not much money.
- Fifty percent of the computers _____ CD-ROM drives.
- Ten kilometres _____ too far to walk.

Sources:
Armer, T. (2011) ***Cambridge English for Scientists*** CUP
Swan, M. (1991) ***Practical English Usage*** OUP
Wallwork, A. (2013) ***English for Academic Research - Grammar Exercises*** Springer
Wallwork, A. (2013) ***English for Research – Usage, Style, and Grammar*** Springer (adapted)
Ex. 6 & 7 adapted from A. Rozkošná (*Sources: Lesson based on* Bates, Martin and Dudley-Evans, Tony (1990): *Nucleus of General Science.* Longman; Zemanová, Alena (1989) *Angličtina pre fyzikov*)
14b: A. Suchomelová, original material
www.wikipedia.com
http://www.writing.utoronto.ca/advice/english-as-a-second-language/expressions-of-quantity