A matter of length

Teacher's notes

Level: Intermediate
Topic: Pythagoras' theorem
Subject: Mathematics
Time (approx): Activity 1: 5 minutes
Activity 2: 15 – 20 minutes
Activity 3: 15 – 30 minutes
Preparation: One photocopy for each student.

Procedure:

Activity 1

Note: This is a warm-up activity designed to check key vocabulary. If students have already done the Shapes CLIL material, then this is simple revision.

- Give each student a copy of the worksheet.
- Put students in pairs and ask them to do activity 1.
- Check they understand that they should use the words in the box to label the diagram.
- For students who finish quickly, tell them to read the information in the box.
- Check the answers as a class.

Key

1 side **2** angle **3** length

Activity 2

- Pre-teach any vocabulary you feel may cause problems for your students, e.g. *calculate, measure, measurement, square root, equation*.
- Ask students to read the text and then decide if the six sentences at the end are true or false.
- Monitor and help where necessary.
- Once the students have finished, put them in pairs and get them to check their answers together.
- Finally, check as a class.

Key

1 true
2 false (it will be the same)
3 true
4 false (3 is the square root of 9, not 12)
5 F (only with right-angled triangles)
6 true

Activity 3

- Ask students to read the short text and then stop.
- Put students in pairs and get them to explain the text to each other and check they understand it.
- Monitor and help where necessary.
- Next, put students into small groups (3 – 4).
- Ask them to work in their group and answer the four questions/problems.
- Monitor again.
- Finally, check the answers as a class.

Note: If you want to make this competitive, you could remove the task from the worksheet and display each question/problem one at a time either on an OHT or board and make it into a quiz (award one point to the first student to answer correctly).

Key

1 b
2 a
3 10
4 3

Useful websites

http://www.bbc.co.uk/history/historic_figures/pythagoras.shtml
http://www.bbc.co.uk/schools/gcsebitesize/maths/shapeih/pythagorastheoremrev1.shtml
http://www.mathsnet.net/dynamic/pythagoras/index.html