π Day (A2 - Pre-Intermediate)

A – Before you start

Answer the questions with a partner.
1. Which school subjects do you like best?
2. Which do you like least?
3. Why, in your opinion, is mathematics considered such an important subject in today's world?
4. Are you good at mathematics?
5. What do you know about π (pi)?

B – Listen and answer

Read these incomplete statements. Then listen (without reading) and complete them.
1. π (pi) is the _____ letter of the Greek alphabet.
2. The first digits of pi are 3.14, but it has an _____ _____ of digits after the decimal point.
3. The decimal representation of pi has been extended to many _____ of digits.
4. Pi Day was founded in _____ by Larry Shaw.
5. In 2019, _____ declared Pi Day the International Day of Mathematics.
6. A Japanese man memorised over _____ _____ _____ digits of pi.
7. Maths skills are used every day when _____ a budget, _____ money and paying bills.
8. Maths also plays a role in art, _____, _____ and space exploration.

C – Read and answer

Read the article and answer the questions.
1. What is the other name for pi?
2. What is pi used to calculate?
3. Who were the first people to make calculations using this number?
4. How did it get the name pi?
5. Why was 14th March chosen as the day on which to celebrate pi?
6. What was Larry Shaw's purpose in founding Pi Day?
7. How is it often celebrated? Why?
8. Why is mathematics important for chess players and athletes?

D – Learn it! Use it!

Complete these sentences with words from the glossary. (You may have to adapt the expression in some way; e.g. change the verb tense, or change from singular to plural.)
1. My father taught me to play _____, but I'm not very good at it.
2. It's Sean's birthday, so we've _____ him a cake and we're going to put candles on it.
3. Irene couldn't pay the restaurant _____ because she'd left her credit card at home.
4. Grandad loves to talk about football. If you _____ him, he'll go on about it all evening.
5. In the US and the UK, a _____ is one million, million.
6. A strong password should contain uppercase letters, _____ letters, numbers and symbols.

E – Ready for the A2 KEY English Test? (Paper 1, Part 4)
Choose the best word for each space.

Archimedes was born in about 287 BC in Syracuse, Sicily, which was [1]_____ (after/ever/then) part of Greece. He was one of the greatest mathematicians in history. His obsession with mathematics [2]_____ (gave/led/took) him to derive and prove several geometrical theorems, [3]_____ (inclusive/included/including) the area of a circle and the volume of a sphere. Archimedes was [4]_____ (too/also/as well) an astronomer, physicist and inventor. He invented devices to defend Syracuse from the Romans, like machines that [5]_____ (dropped/fell/placed) rocks on the enemy and, it is said, a system of mirrors [6]_____ (to/for/by) focus sunlight on their ships and set fire to them. However, the Romans successfully captured the city in 212 BC, and Archimedes was killed by a Roman soldier.

F – Check your pronunciation
One of the four words in each group has a different vowel sound. Which one?

1. en<u>cou</u>rage   f<u>ou</u>nded   circ<u>u</u>mference   c<u>ou</u>ntries
2. th<u>eo</u>ry   c<u>i</u>rcle   <u>ea</u>rliest   v<u>e</u>rsion
3. m<u>a</u>ny   sp<u>e</u>cial   m<u>ea</u>ning   m<u>ea</u>sure
4. s<u>a</u>me   <u>a</u>ncient   celebr<u>a</u>tion   irr<u>a</u>tional
5. m<u>o</u>ves   impr<u>o</u>ve   disc<u>o</u>ver   comp<u>u</u>ter

G – Talk about it
In pairs or groups.

1. Is Pi Day celebrated in your country? If so, how?
2. Do schools in your country devote a lot of time to teaching STEM subjects?
3. If so, do you think this is right? Why (not)?
4. Are STEM subjects less popular with girls in your country?
5. Do you think more girls should be encouraged to study them? Why (not)?

Answers: π Day (A2)

B — Listen and answer
1. sixteenth/16th   2. infinite number   3. trillions   4. 1988   5. UNESCO   6. a/one hundred thousand   7. planning – saving   8. music – medicine

C — Read and answer
1. Its other name is the Archimedes constant.   2. It's used to calculate the size/circumference/area of a circle.   3. The Egyptians and the Babylonians.   4. The Welsh mathematician William Jones first gave it the name pi in 1706.   5. Because in some countries like the US, 14th March is written as 3/14, and these numbers are the first three digits of pi.   6. His purpose was to encourage children to take more interest in mathematics.   7. People often bake pies to celebrated it, because the word pi is pronounced the same as 'pie'.   8. Chess players use mathematics to plan their moves. Athletes use it to analyse their speed, timing and strategies.

D — Learn it! Use it!
1. chess   2. baked   3. bill   4. encourage   5. trillion   6. lowercase

E — Ready for the A2 KEY English Test?
1. then   2. led   3. including   4. also   5. dropped   6. to

F — Check your pronunciation
1. founded   2. theory   3. meaning   4. irrational   5. discover

SpeakUp