Answers - Place value to 1000

Year: Year 3

Answer to Question 1

a. 346, three hundred and forty-six. There are 3 hundreds, 4 tens and 6 ones.
b. 507, five hundred and seven. There are 5 hundreds, 0 tens and 7 ones.
c. 820, eight hundred and twenty. There are 8 hundreds, 2 tens and 0 ones.

Answer to Question 2

a. In 472 the digit is 4, so its value is **400**.
b. In 605 the digit is 0, so its value is **0**.
c. In 380 the digit is 8, so its value is **80**.
d. In 919 the digit is 9, so its value is **9**.

Answer to Question 3

a. 736 = 700 + 30 + 6. Check: 736 = 736.
b. 490 = 400 + 90 + 0. Check: 490 = 490.
c. 208 = 200 + 0 + 8. Check: 208 = 208.
d. 555 = 500 + 50 + 5. Check: 555 = 555.

Answer to Question 4

a. 234 is 2 hundreds, 3 tens and 4 ones: **two hundred and thirty-four**. In British English we say "and" after the hundreds.
b. 560 is 5 hundreds and 6 tens with no ones: **five hundred and sixty**.
c. 807 has 8 hundreds, 0 tens and 7 ones. The zero is not said aloud: **eight hundred and seven**.
d. Four hundred is 4 in the hundreds, sixteen is 1 ten and 6 ones: **416**.
e. Seven hundred is 7 hundreds and ninety is 9 tens, with no ones, so write a zero in the ones column: **790**.

Answer to Question 5

a. 10 more is **356** and 10 less is **336**.
b. 10 more is **600** and 10 less is **580**.
c. 10 more is **215** and 10 less is **195**.
d. 10 more is **710** and 10 less is **690**.

e. 10 more is **621** and 10 less is **601**.

Answer to Question 6

a. Add 1 to the hundreds digit: 235 + 100 = **335**.
b. Take 1 from the hundreds digit: 678 − 100 = **578**.
c. Add 1 to the hundreds digit: 450 + 100 = **550**.
d. Take 1 from the hundreds digit: 902 − 100 = **802**.
e. Add 1 to the hundreds digit: 899 + 100 = **999**.

Answer to Question 7

a. 4 × 100 = 400, 7 × 10 = 70 and 5 loose. 400 + 70 + 5 = **475** sweets.
b. **four hundred and seventy-five**.
c. 100 ÷ 10 = **10** tubs, because 10 tens make 100.
d. 300 + 170 + 5 = 475. **Yes**: the same total, written as 3 hundreds, 17 tens and 5 ones.

Answer to Question 8

a. Compare the hundreds: Adventure has 4 hundreds, Animals 3 and Space 4. Adventure (428) and Space (482) tie on the hundreds. Compare the tens: 8 tens is more than 2 tens. **Space** has the most.
b. Animals has only 3 hundreds, so **Animals** has the fewest.
c. **309, 428, 482**.
d. 309 + 100 = **409**.

Answer to Question 9

a. 650 is 6 hundreds and 5 tens: **six hundred and fifty**.
b. 10 more adds 1 to the tens digit: 650 + 10 = **660** tickets for the South stand.
c. 100 fewer takes 1 from the hundreds digit: 650 − 100 = **550** tickets for the East stand.
d. Compare 660, 650 and 550. The hundreds show East is smallest; for 660 and 650 compare the tens. Biggest first: **South, North, East**.

Answer to Question 10

a. Add 50 each time: **250, 300, 350, 400**.
b. 100, 200, 300, 400, 500. The fifth number is **500**.
c. Zara says 100 and Noah says 100. So the first number is **100**.

d. 1000 ÷ 50 = **20** numbers.

Answer to Question 11

a. Count in 4s, one number per coin: 4, 8, 12, 16, 20, 24, 28, 32, 36. Ben has **36p**. This is 9 × 4.
b. Count in 8s, one number per coin: 8, 16, 24, 32, 40, 48. His sister has **48p**, which is 6 × 8.
c. Compare 48p and 36p: 4 tens is more than 3 tens, so **his sister** has more money.
d. Find the difference: count on from 36 to 48, which is 4 to reach 40 and 8 more. She has **12p** more.

Answer to Question 12

a. Between 700 and 800.
b. 740 is less than 750, so it is closer to **700**.
c. 470 is between 400 and 500. The middle is 450 and 470 is more, so it is closer to **500**.

Answer to Question 13

a. 300 + 20 + 8 = **328**.
b. 300 + 30 = **330**. That is 2 too many.
c. The middle is 350. 328 is less than 350, so it is closer to **300**.
d. **three hundred and twenty-eight**.

Answer to Question 14

a. 345 < 354. The hundreds match; compare the tens.
b. 609 < 690. The hundreds match; compare the tens.
c. 782 > 728. The hundreds match; compare the tens.
d. 555 = 555. Compare the ones.
e. 399 < 401. The hundreds differ.

Answer to Question 15

a. The ones digit must be odd and the number is less than 603, so it is 601. **601**.
b. 5 + 5 + 5 = 15. His number is **555**.
c. 289 + 10 = **299**. Careful: the tens go from 8 to 9, so 299.
d. 1000 − 100 = **900**.

Answer to Question 16

a. Amy: 2 packs, 9 strings, 3 single = 293. Ben: 3 packs, 0 strings, 8 single = 308. Cara: 2 packs, 10 strings, 0 single = 300. Dev: 3 packs, 0 strings, 0 single = 300.
b. **Ben** with 308. The others have 293, 300 and 300.
c. Cara: 200 + 100 + 0 = 300. Dev: 300. **Yes**, because 10 strings of 10 make 100.
d. 293, 300, 300, 308.

Answer to Question 17

a. Compare hundreds: Top 960 is highest; Valley 180 is lowest. **Highest: Top, lowest: Valley**.
b. **180, 305, 530, 590, 960**. 530 comes before 590 because 3 tens are less than 9 tens.
c. 530 + 100 = **630** metres.
d. 590 is just 10 below 600 and 90 above 500. **Yes**, she is right.

Answer to Question 18

a. 259, 295, 529, 592, 925, 952.
b. Biggest: **952** (largest digit in the hundreds place). Smallest: **259**.
c. 952 − 259 = **693**.
d. 529 is 29 above 500, but 295 is 205 below 500. So **529** is closest.

Answer to Question 19

a. Find how far each guess is from 427. 427 − 400 = 27 and 450 − 427 = 23. 23 is less than 27, so **Tom's** guess is closer.
b. 10 more than 427 adds 1 to the tens digit: Ali guesses **437**.
c. 100 less than 427 takes 1 from the hundreds digit: Sara guesses **327**.
d. Compare the hundreds first: 327 is the only number with 3 hundreds. Then for 400, 437 and 450 compare the tens: **327, 400, 437, 450**.

Answer to Question 20

Let the ones digit be o. Then the hundreds digit is o + 4 and the tens digit is 0. Sum of digits: (o + 4) + 0 + o = 10, so 2o + 4 = 10. That gives 2o = 6, so o = 3.

The hundreds digit is 3 + 4 = 7. The code is **703**. Check: 7 − 3 = 4 and 7 + 0 + 3 = 10. Only one value of o works, so there is **only one code**.