What digits are worth: answers and notes

What your child practised: finding the value of each digit in numbers up to ten million on a place value chart, and splitting numbers into their parts (Year 6).

Page 1 · Warm up

5,821,340: **800,000** · 2,603,519: **2,000,000** · 7,456,000: **6,000** · 9,000,402: **400**

Page 2 · Try it together

Answers will vary. Check that the value has the right number of zeros for its column, like 4 in the TTh column = 40,000.

Page 2 · A. Value of the digit

3,284,615: **80,000** · 6,072,940: **40** · 1,958,307: **900,000** · 8,405,126: **5,000** · 4,610,893: **800** · 2,347,058: **8** · 9,513,270: **9,000,000** · 7,069,481: **60,000**

Page 3 · B. Split the numbers

3,506,240 = 3,000,000 + **500,000** + 6,000 + **200** + 40

8,090,705 = 8,000,000 + **90,000** + 700 + **5**

1,234,567 = **1,000,000** + 200,000 + **30,000** + 4,000 + **500** + 60 + 7

Page 3 · C. The 6 is worth 60,000

Ring **2,469,031** and **8,260,000**.

Page 3 · D. Digits

5,207,309 · **4,080,601**

Page 3 · E. Put together

7,030,405 · **2,900,008** · **4,061,000**

Challenge: No. The 7 is in the **hundred thousands** column, so it is worth **700,000**. Leo gave the digit, not its value. You can check by splitting: 4,739,152 = 4,000,000 + **700,000** + 30,000 + 9,000 + 100 + 50 + 2.

Watch out for

- **Giving the digit, not its value:** "the 7 is worth 7". Ask "7 what?" and write the zeros: 7 hundred thousands = 700,000.
- **Mixing up neighbouring columns**, such as ten thousands and hundred thousands. Read the group names: in the thousands group it goes hundred thousands, ten thousands, thousands.

Going further (5 minutes, no paper)

- **Point and say:** say a big number like 3,482,000. Ask "What is the 4 worth?"
- **Number spotting:** look for long numbers on a car's mileage, a box or a sign and say the value of the first digit.
- **In the game:** Chapter 2, Reading and writing numbers up to 10,000,000, turns digits into words and back.