Compound Interest

ANSWERS

1

£200 is saved at 10% compound interest a year. How much is there after 2 years?

Start	Year 1	Year 2
£200	£220	£242
	+ £20	+ £22

Year 1 **10% of** £200 = £20

Year 2 **10% of** £220 = £22

2

£300 is saved at 10% compound interest a year. How much is there after 2 years?

Start	Year 1	Year 2
£300	£330	£363
	+ £30	+ £33

Year 1 **10% of** £300 = £30

Year 2 **10% of** £330 = £33

3

£500 is saved at 10% compound interest a year. How much is there after 2 years?

Start	Year 1	Year 2
£500	£550	£605
	+ £50	+ £55

Year 1 **10% of** £500 = £50

Year 2 **10% of** £550 = £55

4

£400 is saved at 10% compound interest a year. How much is there after 2 years?

Start	Year 1	Year 2
£400	£440	£484
	+ £40	+ £44

Year 1 **10% of** £400 = £40

Year 2 **10% of** £440 = £44

5

£600 is saved at 10% compound interest a year. How much is there after 2 years?

Start	Year 1	Year 2
£600	£660	£726
	+ £60	+ £66

Year 1 **10% of** £600 = £60

Year 2 **10% of** £660 = £66

6

£100 is saved at 10% compound interest a year. How much is there after 2 years?

Start	Year 1	Year 2
£100	£110	£121
	+ £10	+ £11

Year 1 **10% of** £100 = £10

Year 2 **10% of** £110 = £11

7

Mia saves £700 in a bank. It pays 10% compound interest a year.
How much does she have after 2 years?

Start	Year 1	Year 2
£700	£770	£847
	+ £70	+ £77

Year 1 **10% of** £700 = £70

Year 2 **10% of** £770 = £77

8

Sam borrows £800.
10% compound interest is added each year. How much does he owe after 2 years?

Start	Year 1	Year 2
£800	£880	£968
	+ £80	+ £88

Year 1 **10% of** £800 = £80

Year 2 **10% of** £880 = £88

Compound Interest *further practice*

ANSWERS

9

£900 is saved at 10% compound interest a year. How much is there after 2 years?

Start	Year 1	Year 2
£900	£990	£1089
	+£90	+£99

Year 1 **10% of** £900 = £90

Year 2 **10% of** £990 = £99

10

£3000 is saved at 10% compound interest a year. How much is there after 3 years?

Start	Year 1	Year 2	Year 3
£3000	£3300	£3630	£3993
	+£300	+£330	+£363

Year 1 **10% of** £3000 = £300

Year 2 **10% of** £3300 = £330

Year 3 **10% of** £3630 = £363

11

£5000 is saved at 10% compound interest a year. How much is there after 3 years?

Start	Year 1	Year 2	Year 3
£5000	£5500	£6050	£6655
	+£500	+£550	+£605

Year 1 **10% of** £5000 = £500

Year 2 **10% of** £5500 = £550

Year 3 **10% of** £6050 = £605

12

Leo saves £4000 in a bank.
It pays 10% compound interest a year. How much does he have after 3 years?

Start	Year 1	Year 2	Year 3
£4000	£4400	£4840	£5324
	+£400	+£440	+£484

Year 1 **10% of** £4000 = £400

Year 2 **10% of** £4400 = £440

Year 3 **10% of** £4840 = £484

13

£2000 is saved at 10% compound interest a year for 2 years.
How much interest is that in total?

Start	Year 1	Year 2
£2000	£2200	£2420
	+£200	+£220

2420 – 2000 = 420

Answer £420

14

Tom saves £6000 at 10% compound interest a year. After how many years does he have more than £7000?

Start	Year 1	Year 2	Year 3
£6000	£6600	£7260	
	+£600	+£660	+

£7260 is more than £7000

Answer 2 years

15

£1000 is saved for 2 years at 10% a year. Bank A pays simple interest. Bank B pays compound interest. Which bank pays more?

Start	Year 1	Year 2
£1000	£1100	£1210
	+£100	+£110

A: 1000 + 100 + 100 = 1200

B: 1210

Answer Bank B

16

Ali saves £8000 at 10% compound interest a year for 2 years.
He says he has £9600. What has he done wrong?

Start	Year 1	Year 2
£8000	£8800	£9680
	+£800	+£880

Ali should find 10% of £8800

Right answer £9680