

1. Various answers; examples: A should be partitioned into 6 tenths and 4 hundredths. B should be partitioned into 6 tenths and 22 hundredths. C should be partitioned into 6 tenths and 19 hundredths.
2. The windows can be 2.3mm, 0.6mm, or 4.5mm wide. The safest option is 4.5 because it is the thickest.
3. 4.2, 4.4, 4.5, 4.6, 4.8, 4.9
She is missing 4.3, 4.7 and 5
4. 9m of seatbelt should be purchased. Each seatbelt could be up to 0.7m or 70cm in length so ten seatbelts will need 7m. 6m is not enough.
5. The rocket will burn 7.5 litres of fuel travelling 75 light years.
6. 6 tenths and 12 hundredths = 0.6 and 0.12 = 0.72
8 tenths and 27 hundredths = 0.8 and 0.27 = 1.07
14 tenths and 24 hundredths = 1.4 and 0.24 = 1.64
7. There are 24 combinations: 0.23, 0.25, 0.52, 0.53, 0.32, 0.35, 2.03, 2.05, 2.30, 2.50, 2.35, 2.53, 3.02, 3.05, 3.20, 3.50, 3.25, 3.52, 5.02, 5.03, 5.20, 5.30, 5.23, 5.32

The launch code combination is 2.50 and 5.32

8.

Minute	Distance in m	Distance in km	Minute	Distance in m	Distance in km
Minute 1	100 metres	0.1 km	Minute 4	170 metres	0.17 km
Minute 2	120 metres	0.12 km	Minute 5	230 metres	0.23 km
Minute 3	150 metres	0.15 km	Minute 6	250 metres	0.25 km