Reasoning and Problem Solving – Add Lengths 1

National Curriculum Objectives:

Mathematics Year 3: (3M1a) Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Differentiation:

Developing Add the lengths of 3 objects (in mm) to see if they will or will not all fit on a bridge measured in cm.
Secure Add the lengths of 5 objects (either all in cm or all in mm) to see if they will or will not all fit on a bridge measured in whole metres.
Mastery Add the lengths of 5 objects (some in cm and some in mm) to see if they will or will not all fit on a bridge measured in whole metres.

More Reasoning and Problem Solving Resources.

Did you like this resource? Don't forget to review it on our website.

Reasoning and Problem Solving – Add Lengths 1

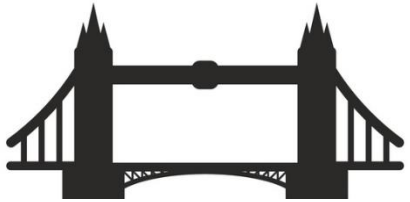
1. A toy bridge is 5cm long.
Will all of the toy lorries fit on the bridge?
Prove it.


25mm


15mm


20mm

2. A toy bridge is 8cm long.
Will all of the toy bicycles fit on the bridge?
Prove it.




36mm


18mm


26mm

3. The gap under the bridge is 6cm long.
Will all of the boats fit under the bridge together?
Prove it.


15mm


31mm


13mm

4. A toy bridge is 6cm long.
Will all of the toy cars fit on the bridge?
Prove it.


14mm


26mm


20mm

Reasoning and Problem Solving – Add Lengths 1

5. A toy bridge is 1m long.
Will all of the toy lorries fit on the bridge?
Prove it.

 35cm

 15cm

 25cm

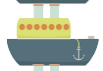
 10cm

 20cm

6. The gap under the bridge is 3m.
Will all of the boats fit under the bridge together?
Prove it.

 350mm

 261mm

 315mm

 168mm

 206mm

7. A toy bridge is 2m long.
Will all of the toy buses fit on the bridge?
Prove it.

 58cm

 63cm

 25cm

 28cm

 43cm

8. A toy bridge is 2m long.
Will all of the toy motorbikes fit on the bridge?
Prove it.

 430mm

 326mm

 242mm

 113mm

 236mm

Reasoning and Problem Solving – Add Lengths 1

9. A toy bridge is 1m long.
Will all of the vehicles fit on the bridge?
Prove it.

 35cm

 15cm

 345mm

 10cm

 257mm

10. A toy bridge is 6m long.
Will all of the vehicles fit on the bridge?
Prove it.

 3,456mm

 1,550mm

 25cm

 10cm

 261mm

11. A toy bridge is 2m long.
Will all of the vehicles fit on the bridge?
Prove it.

 490mm

 513mm

 25cm

 645mm

 20cm

12. A toy bridge is 1m long.
Will all of the vehicles fit on the bridge?
Prove it.

 365mm

 5cm

 25cm

 185mm

 20cm

classroomsecrets.com

Reasoning and Problem Solving – Add Lengths 1

Developing

1. 25 + 15 + 20 = 60 mm. 60mm is more than 5cm, so the lorries will not all fit on.
2. 36 + 18 + 26 = 80mm. 80mm is equal to 8cm, so the bicycles will all fit on.
3. 5 + 31 + 13 = 59mm. 59mm is less than 6cm, so the boats will all fit under.
4. 14 + 26 + 20 = 60mm. 60mm is equal to 6cm, so the cars will all fit on.

Secure

5. 35 + 15 + 25 + 10 + 20 = 105cm. 105cm is longer than 1m, so the lorries will not all fit on.
6. 350 + 261 + 315 + 168 + 206 = 1,300mm. 1,300mm is shorter than 3m, so the boats will all fit under the bridge.
7. 58 + 63 + 25 + 28 + 43 = 217cm. 217cm is longer than 2m, so the buses will not all fit on.
8. 430 + 326 + 242 + 113 + 236 = 1,347mm. 1,347mm is shorter than 2m, so the motorbikes will all fit on.

Mastery

9. 350 + 150 + 345 + 100 + 257 = 1,202mm. 1,202mm is more than 1m, so the vehicles will not fit on.
10. 3456 +1550 +250 + 100 + 261 = 5,617mm. 5,617mm is less than 6m, so the vehicles will all fit on.
11. 490 +513 + 250 + 645 + 200 = 2,098mm. 2,098mm is more than 2m, so the vehicle will not fit on.
12. 365 +50 +250 +185 + 200 = 1,050mm. 1,050mm is more than 1m, so the vehicles will not fit on.