**WORKSHEET A**

1. Charlie catches a fish weighing 13g to the nearest gram, and Dan catches a fish weighing 11g to the nearest gram.
2. Write the upper and lower bounds of Charlie’s catch
3. Write the upper and lower bounds of Dan’s catch
4. Work out the greatest possible difference between the weights of their fish.
5. For each rectangle shown below, write the lower and upper bounds of each measurement. Calculate:
6. Each rectangles greatest possible area
7. Each rectangles smallest possible perimeter

3.2cm

9.6cm

C

8m

A

4m

6.5m

7.8m

B

**3.** The diagram represents two metal spheres of different sizes. The radius of the smaller sphere is *r* cm. The radius of the larger sphere is *R* cm.

 *r* = 1.7 correct to 1 decimal place.

 *R* = 31.0 correct to 3 significant figures.

(a) Write down the upper and lower bounds of *r* and *R*.

 (b) Find the smallest possible value of *R* – *r*.

**4.** Each side of a regular pentagon has a length of 101 mm, correct to the nearest millimetre.

(i) Write down the **least** possible length of each side.

 (ii) Write down the **greatest** possible length of each side.

1. By how many millimetres would the length of the greatest possible perimeter differ from the smallest possible perimeter?
2. A Sprinter runs 100m in 12.8s. The distance is measured to the nearest cm and the time is measured to the nearest tenth of a second. Find the greatest and the least speed of the sprinter.