

Task 2

Crossing the Bridge

Equipment: Figures to represent the persons.

Izzy, **Finnic**, **Judy** and **Mr Big** are out walking: They come to a rickety old wooden bridge. The bridge is weak and only able to carry the weight of two of them at a time. Because they are in a rush and the light is fading they must cross in the minimum time possible and must carry a flashlight on each crossing.



Figur 1 From the left: Izzy, Finnic, Judy and Mr Big

They only have one flashlight and it can't be thrown. Because of their different fitness levels and some minor injuries they can all cross at different speeds.

Judy can cross in 2 minutes, **Izzy** in 3 minutes, **Mr Big** in 7 minutes and **Finnic** in 11 minutes.

How fast can they cross the Bridge? How is this done?

Answer **Country:**

They can cross the bridge in _____ minutes in this way:



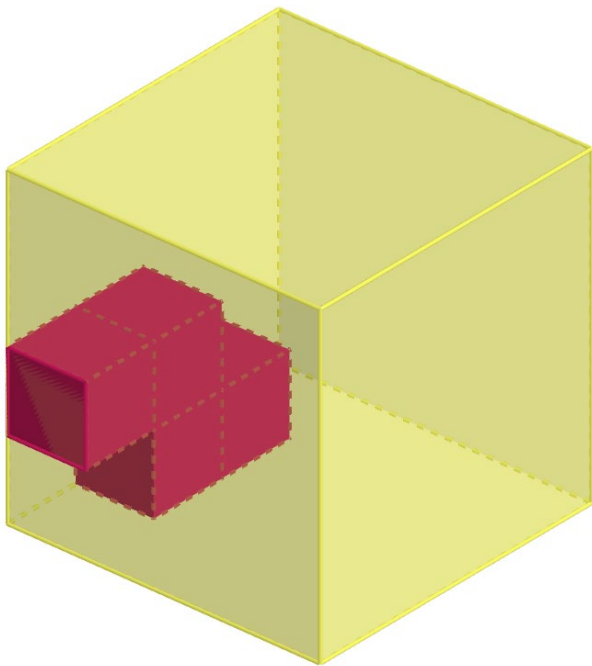
Task 3

A 3D Puzzle

Equipment:

- Puzzle pieces
- A box

How many puzzle pieces can fit in the box?



Show your solution with the equipment.



Task 4

Intersecting Circles

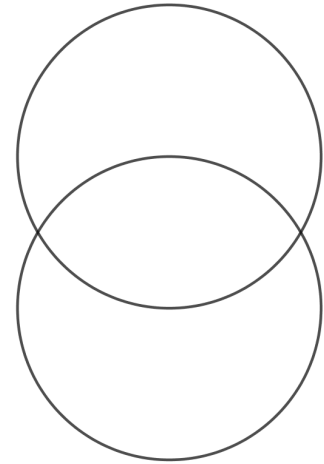
Equipment:

- 20 objects
- Worksheet with two intersecting circles

Place objects into the two intersecting circles so that each circle contains the same number of objects.

In how many different ways can you place

- 17 objects in the circles
- 20 objects in the circles
- 2019 objects in the circles



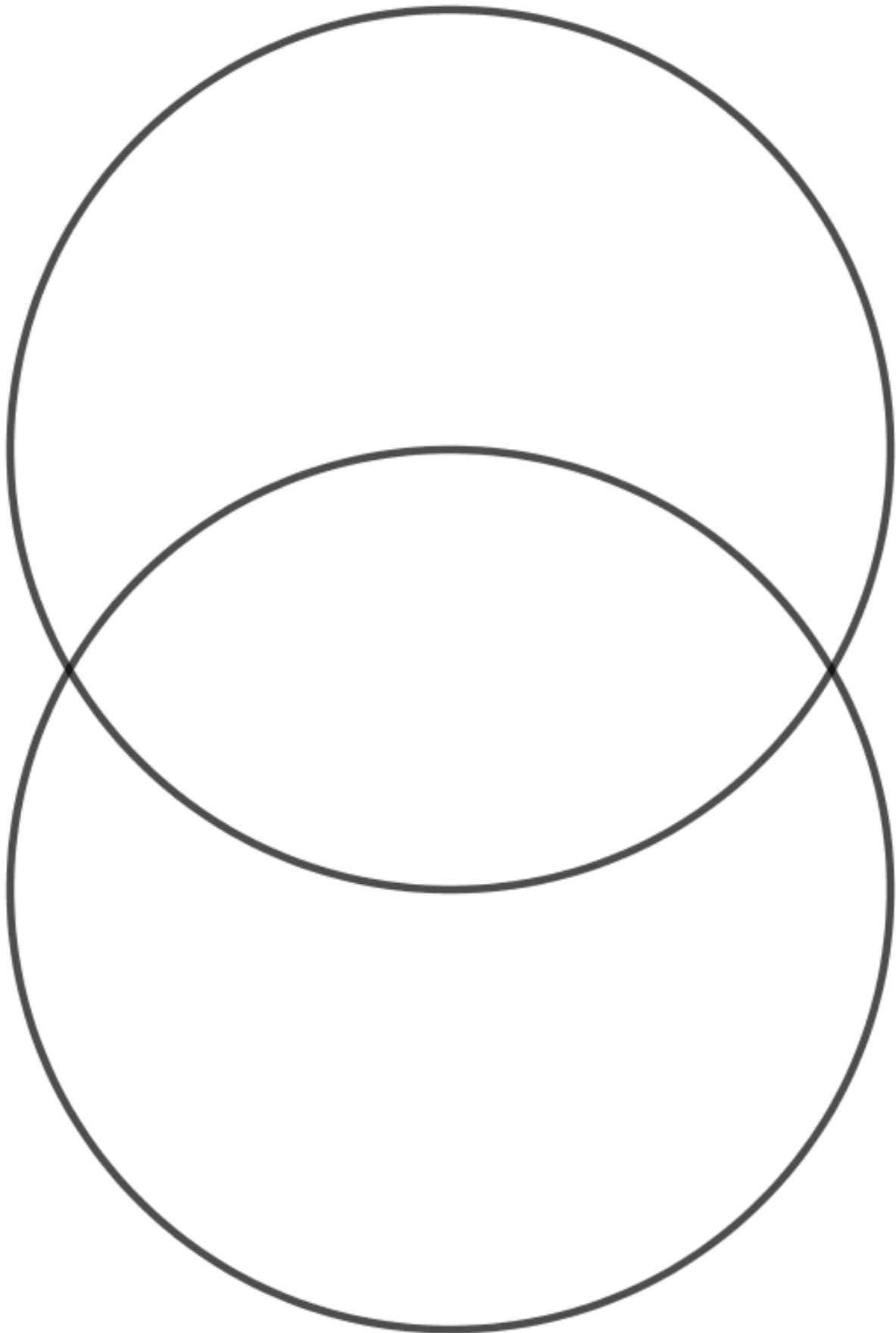
Give a reason for your answers.

Answer

Country:



Worksheet Task 4





Task 5

Scrambled Dice

Equipment:

- 2 dice without dots
- A marker and washcloth

Imagine a typical 6-sided dice, and notice that the sum of opposite faces is always seven. The 1 is across from the 6, the 2 is across from the 5 and the 3 is across from the 4.



Now imagine that you were making your own six-sided dice with the numbers 1-6. The sums of the opposite faces do not have to be the same.

How many dice with different combinations of sums could be made?

Show your answers in the answer sheet.



Answer

Country:

