

You have 3 animals: 2 sheep and a wolf, and you're trying to cross a river in a boat that can hold only 2 passengers (you, plus 1 animal).

Can you figure out a way to transfer all 3 animals to the other side?



There's just one catch: the wolf will eat the sheep if left alone with them, while the wolf won't harm the sheep as long as you are present.

Besides this, you can make as many trips across the river as you want.

Solution (tips for the teacher):

We mark the sides of the river with A and B. Side A is the starting position, and side B is the side where the animals have to be transferred.

Bring the wolf with you on your first trip across the river, and leave him on the other side (side B).

Return back across the river to the starting point (side A), and then bring one sheep across to the other side (side B). Then, switch the sheep and the wolf, leaving the sheep on the river bank (side B) and taking the wolf with you back to the starting point (side A) where you can find the other sheep.

Then, switch the wolf with the other sheep, leaving the wolf on side A and bringing the sheep across the river again to side B. Now, both sheep are safely across the river (side B), so simply go back to side A to take the wolf and transfer it to side B.