

One breeding pair of each zoo animal needs to be shipped across the ocean. First, **fit all of the cages onto the square-shaped holding area** - they can be rotated to fit, but they cannot be reflected.

Next, make sure that the animals can safely occupy the boat. Arrange the animals in the cages to fit the following constraints:

- Exactly two animals per cage; An animal cannot be adjacent to any other animal not even diagonally, and not even if they are in different cages.
- In each row and column, there should be EXACTLY two animals (to balance out the boat weight).

Finally, identify which animals go where. Adhere to the following constraints for the animals:

- -The cages have slats on their sides, so that animals can only look through them perpendicularly (they can't see diagonally).
- Othello can see Nancy; Nancy can see Olivia; Olivia can see Danny; Danny can see Henry; Henry can see Silvia; Silvia can see Othello;
- Oliver can see Edward and Louise; Illinois can see Louise and Pat; Catherine can see Slick and Anna; Ned can see Ivan and Arthur; Pauline can see Ronald and Tanya; Oliver can see Louise and Edward (also, they are both equidistant from Oliver).
- Ronald and Nancy are in a corner cage; Anna and Danny are in the cage with the largest area; Arthur and Pat are in the smallest cage.
- Tanya and Edward are in the same cage and the same row; Slick and Catherine are in the same cage and the same column.
- Pauline and Oliver are in the same cage, but diagonally placed from one another.
- Illinois and Pat are adjacent to the bottom side of the ship; Nancy and Olivia are adjacent to the right side of the ship
- Henry, Anna, and Silvia are the only animals adjacent to only ONE wall (either a cage wall or outer wall).