**Learning Objective**

We are learning how to solve a natural world problem by using and applying our skills and knowledge of area.

**The Problem:**

A grid with grass and circles

AI-generated content may be incorrect.River chub live in the Mississippi river. In one area of the river, on the riverbed, their nests have a diameter of 1 m.

**The stretch of river is 21 m long and 11 m wide.**

There is a minimum gap of 1 m between each nest and a minimum gap of 1 m between each nest and the riverbank.

(**Note:** The picture above does not represent the size of the river stretch that you will need to calculate in order to answer the questions below.)

1. **What is the area of the riverbed on this stretch of river?**
2. **How many rock-pile nests can fit within this area?**
3. **What is the approximate area taken up by the rock-pile nests?**
4. **What is the approximate area of the riverbed that is not covered by rock-pile nests?**