

Ant Super Strength

What is the challenge? Use your super strength to pick up heavy objects and even another person like Ant-Man!

What you need:

- Bedsheet
- Heavy objects
- Colony of ants (people to help you carry)
- Calculator for extension activity



What to do:

- Lay the bedsheet out flat on the ground.
- Place a heavy object on the bedsheet and try lifting it.
- Add more heavy object to the sheet until you can no longer lift it.
- Ask others from your colony to stand around the edge of the bed sheet and help you lift. When ants are unable to lift something on their own, they work together to get the job done.
- Have a volunteer lay down flat on the bedsheet. With help, can you lift the person?

Notes for Adults:

- Remind your learner to be slow and careful when picking up and setting down heavy objects.
- If you chose to lift a volunteer, we recommend placing padding underneath.



**EXPLORATION
PLACE**

THE SEDGWICK COUNTY SCIENCE AND DISCOVERY CENTER

STEM connection:

- Ants can lift between 10 and 50 times their body weight, whereas the average person can't lift more than 1.5 times their body weight.
- When several ants help carry one heavy object, the force of that object is distributed to all the ants helping, so together they can lift more than any single ant could.

Take it further:

- Calculate your strength as Ant-Man!
- Weigh yourself.
- Take your weight and multiply it by 20 to see how much you could lift as Ant-Man!
 - $Weight \times 20 = Ant\ Strength$

