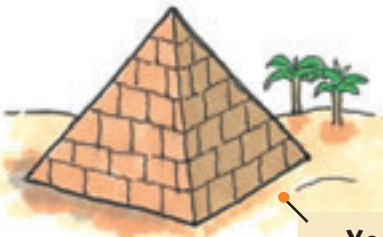# Human Pyramids

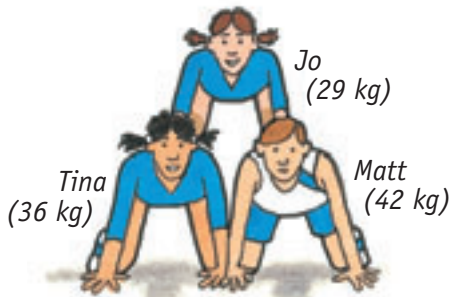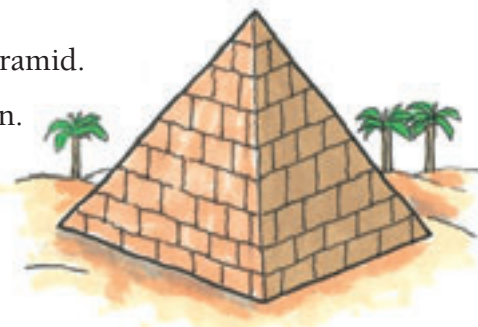**You need** ☑ a calculator (optional)

Activity One

The Aotea Gymnastics Club are working out how to make a human pyramid.

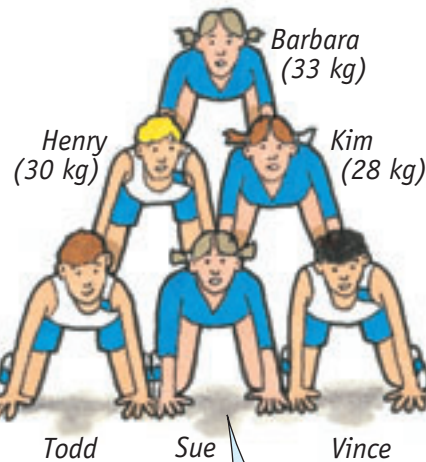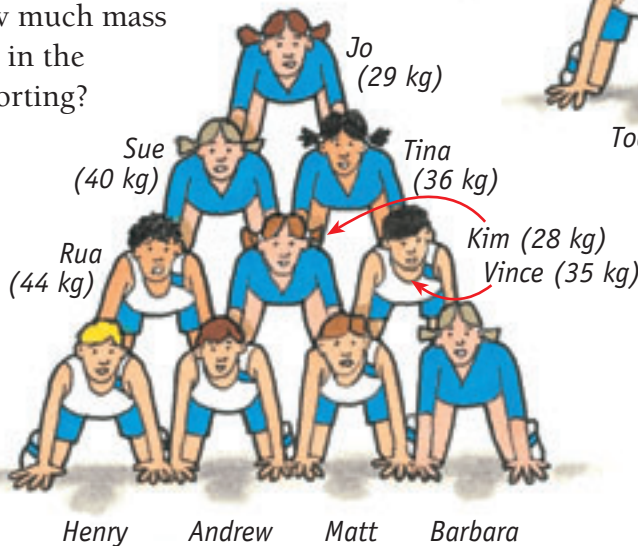1. Here are three people from the club. Each person's mass is shown.

*Jo
(29 kg)*

*Tina
(36 kg)*

*Matt
(42 kg)*

If Jo is the one at the top of the pyramid, how much of her mass will Tina and Matt each have to support?

2. Here is another pyramid.

How much mass is each person on the bottom supporting?

3. Here is a 10-person pyramid. How much mass is each person in the pyramid supporting?

*Barbara
(33 kg)*

*Henry
(30 kg)*

*Kim
(28 kg)*

Todd   *Sue*   *Vince*

Wow! I'm supporting half of Henry and Kim **and** half of Barbara!

*Jo
(29 kg)*

*Sue
(40 kg)*

*Tina
(36 kg)*

*Rua
(44 kg)*

Kim (28 kg)
Vince (35 kg)

Henry   *Andrew*   *Matt*   *Barbara*

Activity Two

a. Draw a make-believe pyramid with 15 students. Each student will need a name and a mass.

b. How much mass is each student supporting?

c. Describe the mass that each person on the bottom row supports.