

## ACTIVITY IA8.1: Group Monster

**Intended learning:** To use informal mental and written strategies for addition and multiplication tasks.

**Instructional mode:** Longer, inquiry mode for groups.

**Materials:** Writing materials, measuring tapes.

**Description:** Begin by imagining that each group is a single monster. A group of five is a monster with five mouths, ten ears and ten googly eyes. Then, each group needs to create a list of the impressive real figures and measurements for their group monster. How many limbs, how many teeth, how many claws (i.e. in the group in total)? What is the monster's age (total the students' ages)? What is the height of the monster (total the students' heights)? How much water does the monster drink each day? Groups can determine what attributes they want to list, but they need to calculate the real figures for their group monster. To finish the activity, each group presents their monstrous figures.

**Responses, variations and extensions:**

- Some group monster figures can be calculated mentally – for example, the number of legs. Some calculations will be beyond mental computation – for example, the total group height. Students can use informal written strategies – jotting – for these calculations.
- Group monster figures are more impressive with larger numbers, so students can be motivated to work with larger numbers. Instead of finding the number of drinks in a day, how about calculating the total volume drunk, in millilitres? Instead of the number of arms, imagine the monster with just one arm – but how long is that arm, in centimetres?
- Some figures can be estimates – for example, how far does the monster walk each day? Still, they need to be reasonable estimates, which will involve some calculating.
- Students may want to organize their data collection in a table, with a column for each member of the group and a final column for the totals.
- The activity can be exciting for students, with imaginative opportunities for performance or story writing. At the same time, it is the real figures for the group that make the monsters impressive. Students can feel very big, knowing their group monster really is 37 years old and 579 cm tall.