

LEARNING with LONGLEAT



Maths
activity

FEEDING THE SEA LIONS



Ask the keeper or listen to the commentary to find out how many sea lions live in Half-Mile Pond. Visitors have the opportunity to purchase a pot of fish to feed the sea lions when on the Jungle Cruise.

Each day, the keepers must calculate how many fish to put in each pot, giving all visitors the opportunity to feed the sea lions whilst ensuring that their diet remains healthy and balanced.

Based on the weather forecast, pre-bookings and time of year, keepers are given an estimate as to how many visitors are expected at Longleat on a given day.

The keepers use this information to calculate how many fish to put in each pot.

Key information

The sea lions each eat approximately 6kg of fish per day.

The fish each weigh approximately 40g.

15% of visitors purchase a pot of fish to feed the sea lions.

**How many sealions
are there?**



Activity

A. On Thursday, 1000 visitors are expected at Longleat.

How many fish should be placed in each pot?

B. On a Saturday with a good weather forecast, approximately 2800 visitors are expected at Longleat.

How many fish should be placed in each pot for this day?

C. Can you formalise this calculation by writing a formula?

D. Why might this method of calculation not be fully reliable?

E. On your visit to Longleat, count how many fish are in your pot.

Use this to estimate how many visitors there should be that day.

Activity

- A.** (i) Approximately how many fish will be required per sea lion every day?
(ii) In total, how many fish will be needed per day?

- B.** On Thursday, there are 1000 visitors expected at Longleat
(i) How many of these are likely to purchase fish?
(ii) Using your answers to A(ii) and B(i), how many fish should be placed in each pot?

- C.** On a Saturday when the weather forecast is good, approximately 2500 visitors are expected at Longleat.
(i) How many of these are likely to purchase fish?
(ii) How many fish should be placed in each pot?

- D.** Do you think that this is the most accurate way to calculate how to feed the sea lions?
Why/Why not?

Would you do anything differently?

- E.** On your visit to Longleat, count how many fish are in your pot.
Use this to estimate how many visitors there should be that day.

