## MAMMALS

## AFTER 2: Trackimatics

After your visit, students objectively compare mammal prints using standard or non-standard measurements to determine size, counting number of toes, and ordering the prints in order of measured size.

Standards Addressed: Science (2018): Foundation Block 3. K.1, K.3. 1.1. 2.1. Mathematics (2016):
Foundation Blocks 1, 3. K.1, K.6, K.9, K.12. 1.2, 1.10, 1.13. 2.8

## Materials

- Student prints from the Blandy visit
- Measuring tools (can be rulers, may also be uniform objects like paperclips or pennies)
- Datasheet


## Lesson Preparation

1. Have student prints from Blandy visit ready to distribute to the appropriate student.
2. Depending on the experiences of your students, have appropriate measuring tools available. For emergent measurers, use uniform non-standard tools like paperclips or pennies. For $2^{\text {nd }}$ grade, use inch graded tools.

## Instructional Strategy:

1. Familiarize students with the datasheet. Help them identify the tasks of drawing their print, measuring it, and counting the number of toes.
a. Demonstrate the measuring technique you want them to use. This may be a time to talk about halves or rounding.
b. Most plaster prints include a plaster base. Make sure you demonstrate to students that they are to measure the PRINT, not the base length.
2. Have students collect and record data on their prints. Encourage them to check each other's work.
3. Bring students together in a circle with their prints and papers. Tell them that we will be comparing prints.
4. Ask who thinks they have the longest print? Call on a student and have them share the length. Ask if anyone has one that is longer. Continue until you identify the longest print.
5. Ask who has the shortest print. Repeat as for longest.
6. Ask students to order their prints from shortest to longest. (Depending on the experience of your students, this kind of ordering may require teacher assistance)
7. Compare the difference between the longest and shortest print. How much longer is the longest print?
8. If all the animals were to make prints one right after the other, how long would that trail of footprints be? How could we figure that out? (More experienced students can practice addition

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equations, less experienced students can compile all their measuring counters, then group into place values to figure out the total length.)
9. Optional extensions:
a. How long are our feet? Have students trace the outline of their feet (with or without shoes) and measure the length of the outline. Compare student foot lengths to each other, as well as to the animal prints.
b. What animal has the LONGEST footprint? (Elephant footprints are approximately 18 inches long, the longest dino footprint ever found was 42 inches long. Have students measure the length and see how many of their prints can fit into each!

## Specials Extension

PE - have student measure their strides when walking, hopping, skipping, and running. Then have them use their strides to measure elements of the gym or outdoor areas.

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## Trackimatics Datasheet



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