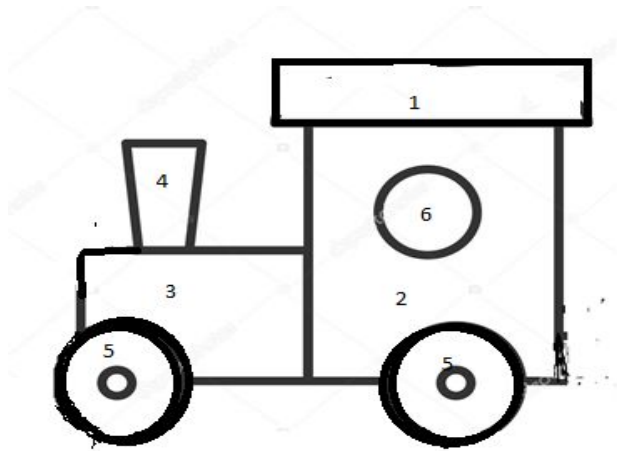
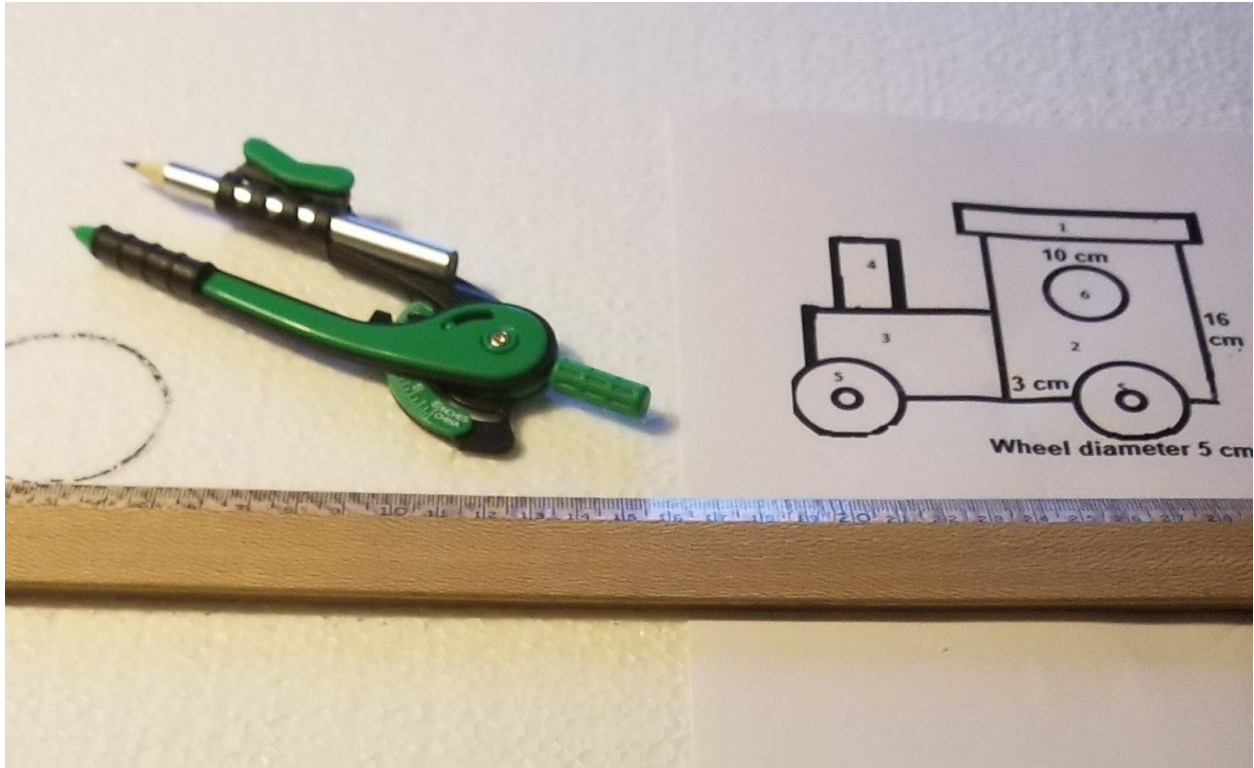


Universal Constants - Foundations of Measurement for the Innovation Age
Lesson 2 - Standardize - Achieve Precision
Engage Activity - Team Engineering

Component Parts Directions and Images



Team 1

Create a hood or roof. The hood is 2 cm tall by 7 cm wide.

Team 2

Create a cab which is 6 cm (wide) x 8 cm (high). Cut out a semicircle with a radius of 1.5 cm and center 4 cm from the left edge of the cab. The center of the circle should be just along the bottom of the cab. At a point 6 cm from the bottom, cut an opening for a circular window 2 cm in diameter.

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Team 3

Create the front of the train, 4 cm tall by 6 cm wide. The point 1 cm from the left side along the bottom is the center of a semicircle 1.5 cm radius. Cut that portion of the front bumper out to create space for the front wheel.

Team 4

Create a steam valve in the shape of a trapezoid, 1.5 cm along the bottom, 2 cm on top, 3.5 cm tall.

Team 5

Cut out two circular wheels with a radius of 1.5 cm. In each wheel, cut an axle hole .75 cm in diameter.

Team 6

Create the window 2 cm in diameter.