Lego Nomenclature

“Learning the Language of LEGO”

www.BotShopRocks.com
Bricks function is to provide the stable physical form of a robot or an attachment.

Remember to say:
Rows by Studs, color, and category

1 X 8, Black Beam

What is the name of the first beams?
What is the name of the second beams?

The name of this part is: 1 X 8 Black Beam
Plates provide the stable physical form of a robot or an attachment.

To name them you must identify:
- Rows by Studs, color, and category

1 X 8, Black Beam

What is the name of the first beams?
What is the name of the second beams?

The name of this part is: 1 X 8 Blue Plate
STUDDED BEAMS HAVE BUMPS (STUDS) ON THE TOP AND HOLES ALONG THE SIDES. THEY ARE NAMES LIKE BRICKS AND PLATES.

TECHNIC BEAMS HAVE NO BUMPS BUT DO HAVE HOLES ALONG THE SIDE. TO NAME THEM YOU JUST COUNT THE HOLES.

1 X 6 Gray Beam

5 Technic Beam
The function of a gear is to transmit mechanical energy within your robot.

They are named by counting the teeth along the wheel.
The function of a belt & pulley is to transmit mechanical energy within your robot. They are named by size of the wheel.
Wheels have two parts:

- Tire
- Hub

They have names by the size, small, medium, or large.
The Function of an axles is to transmit mechanical energy within your robot.

To name the part you will need:

- a brick, beam, or plate longer than the axle
- Line the axle along the beam and count the studs
- The number of studs is the name of a part
- The example is a 10 stud axle
The function of the peg is to join structural elements together in a variety of ways.

They are named by the attributes of the part. For example, a peg with an axle at the end is called an Axle Ended Peg.
Bushings are designed to fill more than one role. They can be used to hold parts in place in a structure or pulley system. They are named by size:

- full bushing
- half bushing
The Electronics components allow the robot to sense and react to its environment.
<table>
<thead>
<tr>
<th>Category</th>
<th>Function (What is it used for?)</th>
<th>How do you name it?</th>
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<td>Gears</td>
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<td>NXT Electronics</td>
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Team Challenge Grading

- 1st Place = 100
- 2nd Place = 95
- 3rd Place = 90
- 4th Place = 80
- 5th Place = 75
- 6th Place = 70