

Name: _____ Date: _____ Class Period: _____

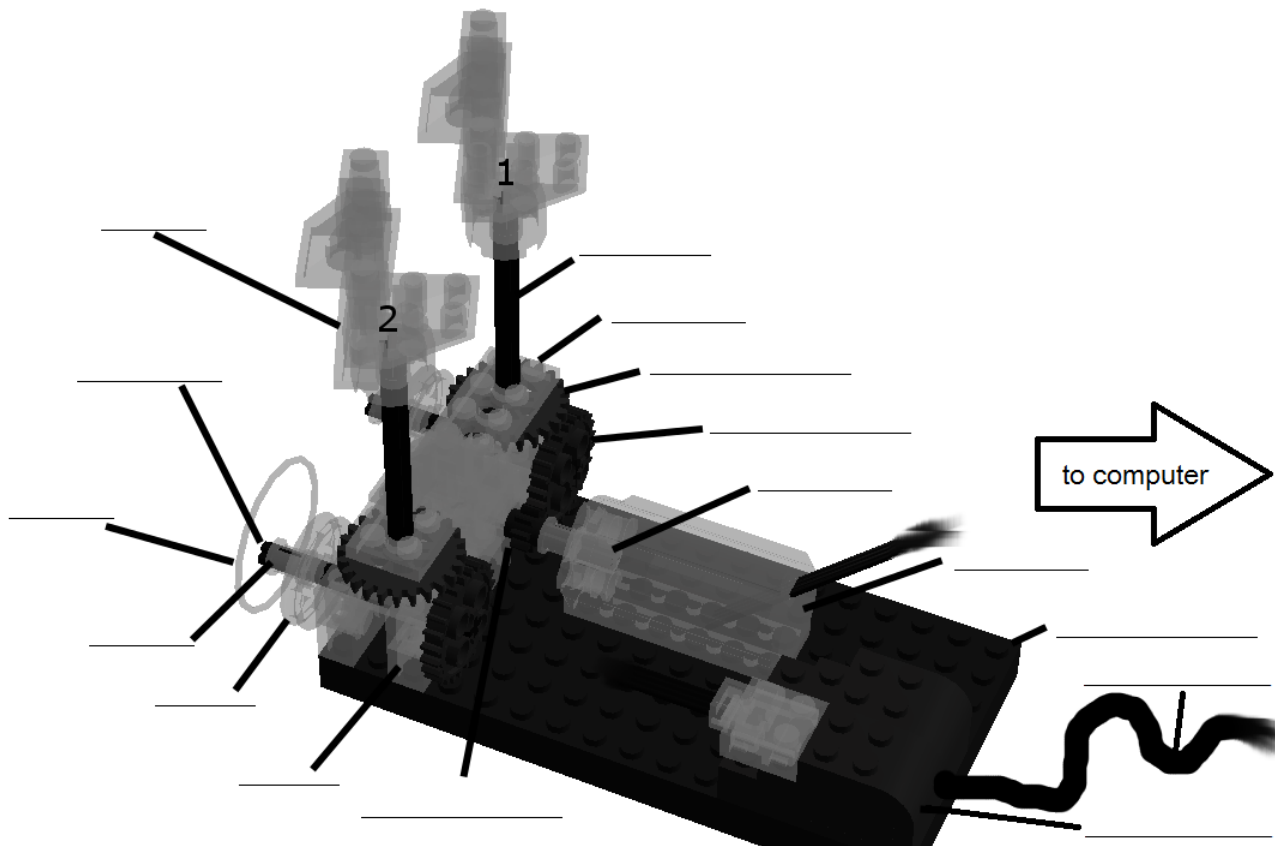
Word Bank:

axle (3-module)
 axle(s) (6-module)
 axle(s) (8-module)
 base brick (8x16)
 beam(s) (1x8)
 belt
 bushing(s)
 gear (8-tooth)
 gear(s) (24-tooth)

gear(s) (crown)
 pulley(s) (or wheel hub)
 plate(s) (2x8)
 program [not shown]
 model(s) (multiple parts)
 motor
 software [not shown]
 USB cable
 USB hub

Part 1:

Label the parts in the diagram.



Part 2:

Explain, piece-by-piece, how the project is put together. (fill in the blanks)

1. The **computer** runs a WeDo _____ within the WeDo _____.
2. The **program** sends signals to the _____ through the _____.
3. When given a signal by the program, the **USB hub** sends power to the _____.
4. A(n) _____ is inserted into the **motor**, so that it spins when the _____ spins.
5. The **3-M axle** from the motor is inserted through a(n) _____ and then through a(n) _____.
6. The **8-tooth gear** is meshed to the first of the two _____.
7. Each **24-tooth gear** is meshed with a(n) _____ at a 90-degree angle.
8. Each **crow** gear is connected to a(n) _____, pointing up, atop which sits one of the _____ of a bird.
9. Each **24-tooth gear** also has a(n) _____ through its center, at the other end of which is connected a(n) _____.
10. The two **pulleys** are connected to each other by a(n) _____.

Now explain, step-by-step, how the whole mechanism works:

When the _____ is signaled to spin, it spins the _____, which spins the _____, which spins the first _____, which then causes several other things to spin: the first _____ and its connected _____ (and _____), and the first _____ and its connected _____. Then, the first _____ pulls on the _____ which causes the second _____ and its connected _____ to spin. This causes the second _____ to spin, which meshes with and makes the second _____ spin, which finally causes the second _____ and second _____ to spin.

Now explain this program, block-by-block (write underneath each block):

