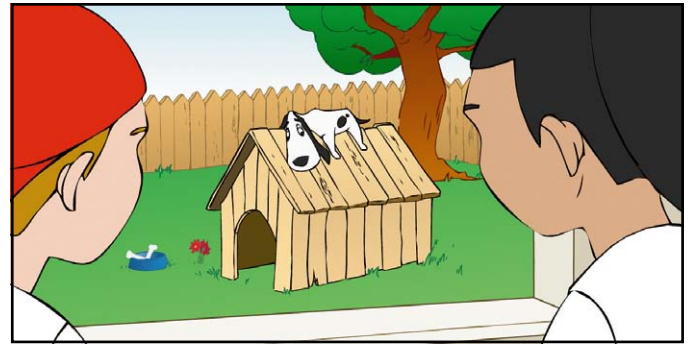


Dogbot

Name(s): _____

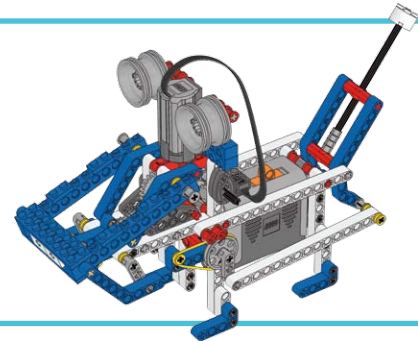
How can we make an exciting friend for Zog to play with?
 Let's find out!



Build Dogbot

(all of book 14A and book 14B to page 19, step 27)

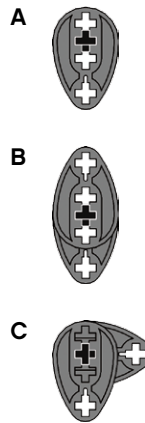
- The lever that forms the upper jaw should move up and down
- The cams should rotate freely moving the eyes attached to the axles up and down
- The lever that acts as a tail should wag up and down



Is Dogbot wide awake?

Which cam setting will produce a sleepy, awake and wide awake Dogbot?

- Predict first which eye action cam setting A will produce. Then test your prediction. Next, follow the same procedure for cam settings B and C.

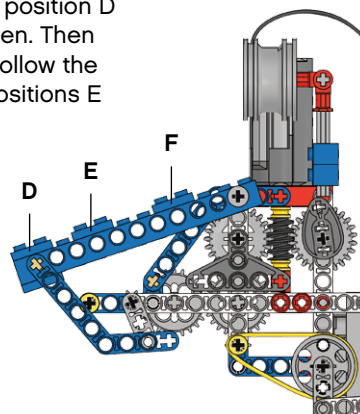


	My prediction	What happened?
A		
B		
C		

Sleepy Awake Wide awake

How wide can Dogbot's jaws open?

- First predict how wide peg position D will make Dogbot's jaws open. Then test your prediction. Next, follow the same procedure for peg positions E and F.




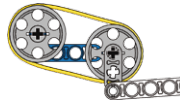

	My prediction	What happened?
D		
E		
F		

Wide Wider Widest

How happy is Dogbot?

Dogbot wags its tail when it is happy. The faster the wag, the happier it is.

- First predict how happy Dogbot is using pulley setting A. Then test your prediction. Next, follow the same procedure with pulley settings B and C.

	My prediction	What happened?
A 		
B 		
C 		



Also try:

- Dress Dogbot up
- Make a cardboard tongue and ears

Happiest Happier Happy

My Dogbot

Draw and label your favorite Dogbot design. Explain how the 3 best parts work.

Did you know?

Your lower jaw is a lever. Feel where the muscle connects to the bone of the lower jaw. Your jaws are third class levers just like Dogbot – just upside down!