

The Walker

Name(s): _____

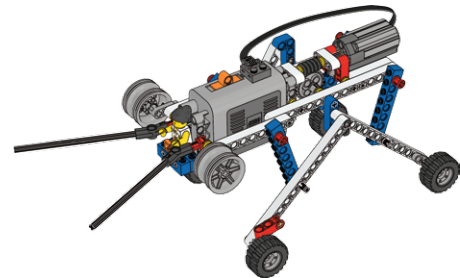
**How can you make a Walker that will carry Jack and Jill along the trail?
 Let's find out!**



Build the Walker

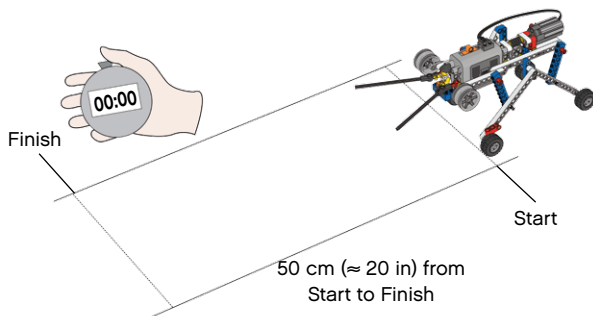
(all of book 13A and book 13B to page 13, step 18)

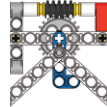
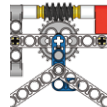
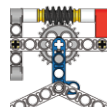
- Make sure the power lead is held clear of all moving parts
- Place it on a smooth surface and start the motor by pushing the battery switch forward
- The legs should move freely



How fast can the Walker walk?

- First predict how long it will take the Walker to walk 50 cm (≈ 20 in) using leg setting A. Then test your prediction. Next, follow the same procedure for leg settings B and C.
- Test several times to make sure your results are consistent.

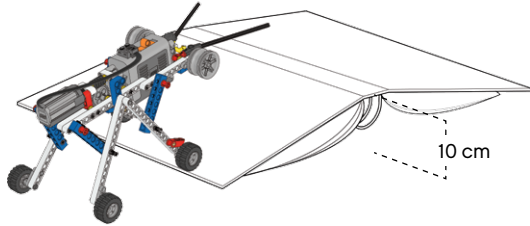


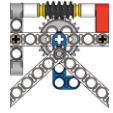
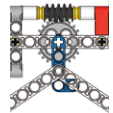
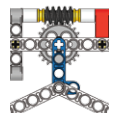
	My prediction	My measurements
A 		
B 		
C 		

Can you explain what the ratchets do?

Climbing over hills

- Make a low hill from a big book or ring binder
- Place the Walker as shown in the illustration
- First predict which leg settings A, B or C is fastest for climbing over hills? Then test which in fact is the fastest hill climber.



	My prediction	My measurements
A 		
B 		
C 		

Slow *Fastest* *Fast*

My Walker

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