

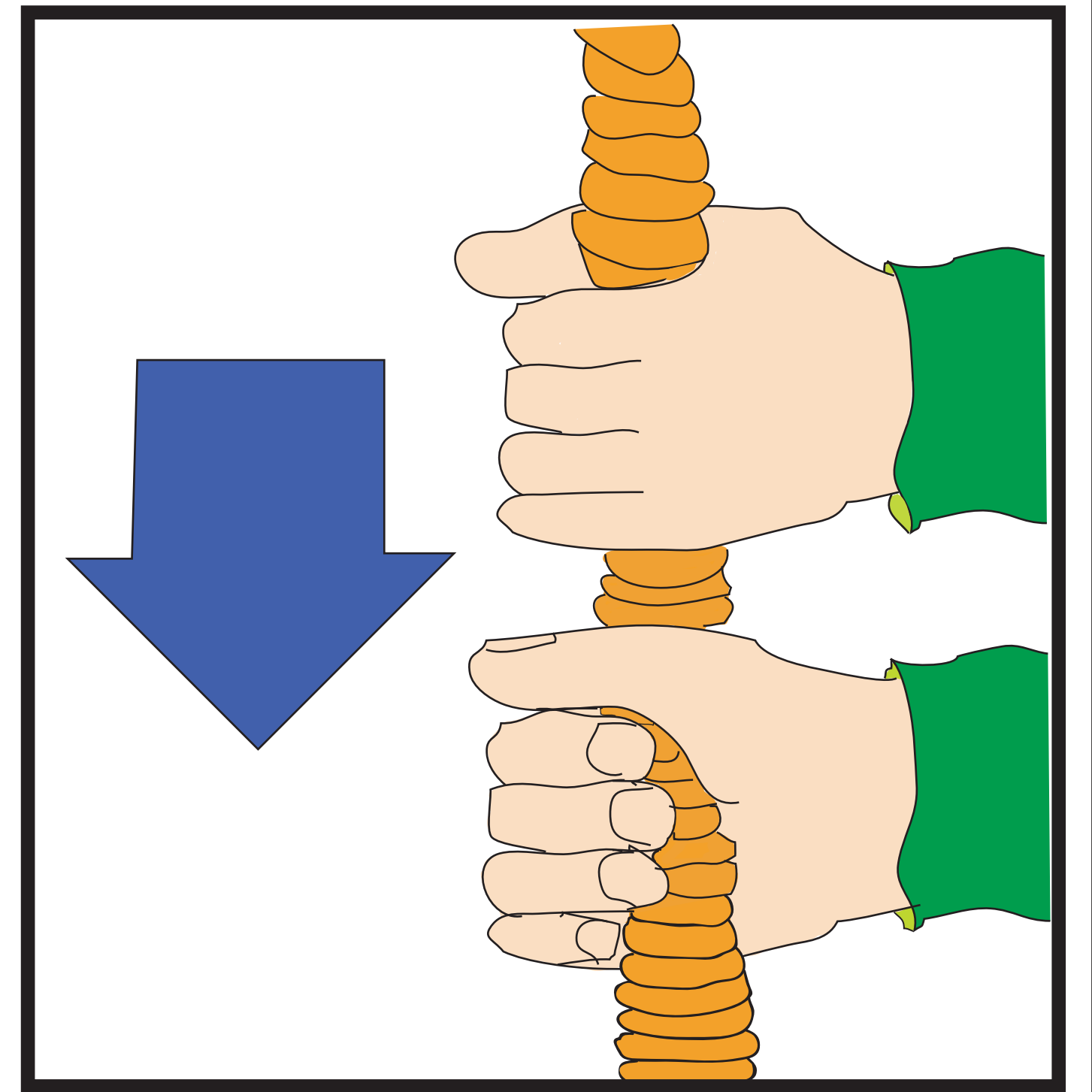
Giant Guitar String

To Do and Notice:

Hold the rope firmly and keep it taut.
Give it a strong jerk downward.

You can make the waves travel faster or slower by adjusting the tension of the overhead rope where it meets the wall.

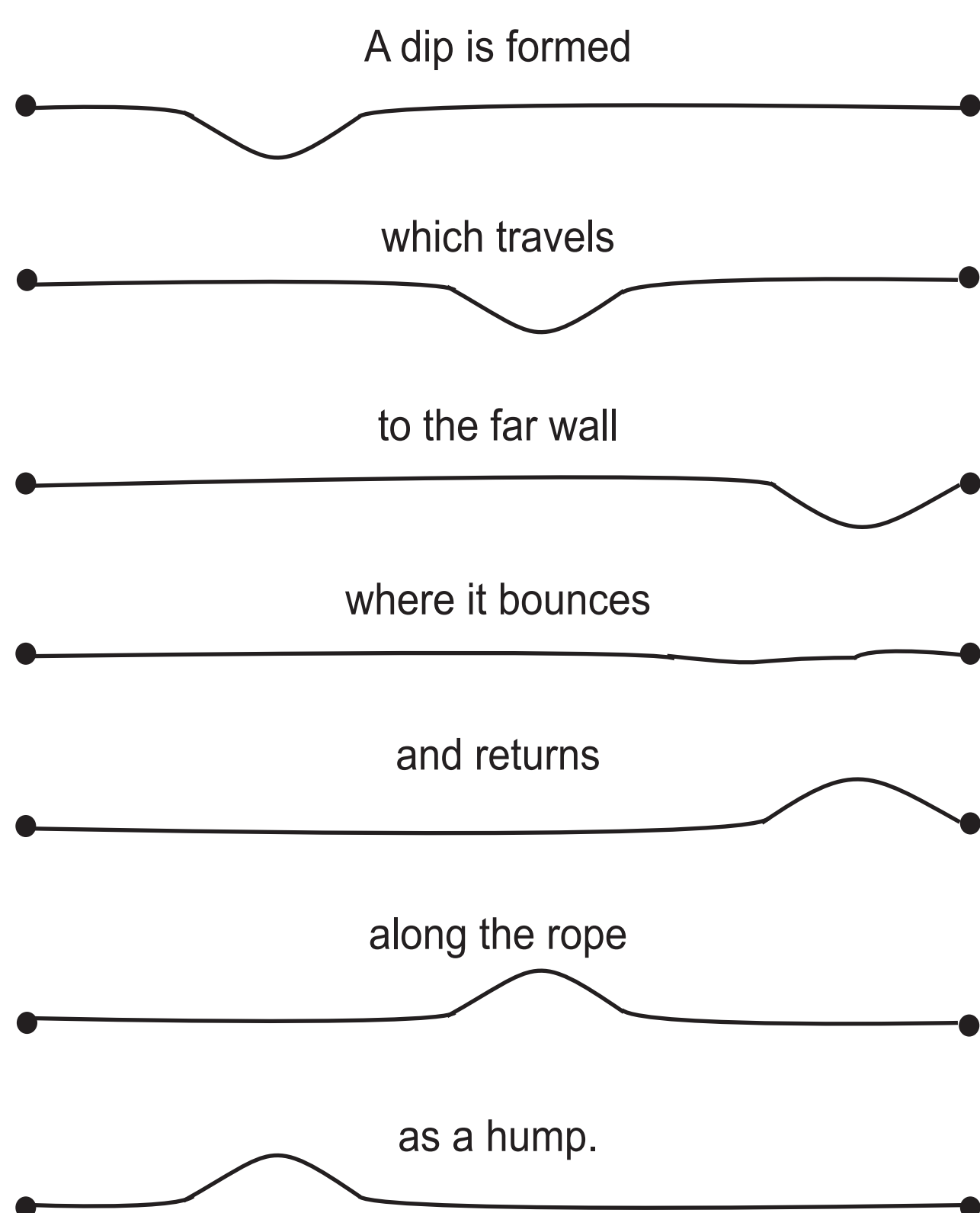
Turning the tuning peg on a guitar has the same effect



Things you can try to do with the guitar string:

1.

SINGLE PULSE

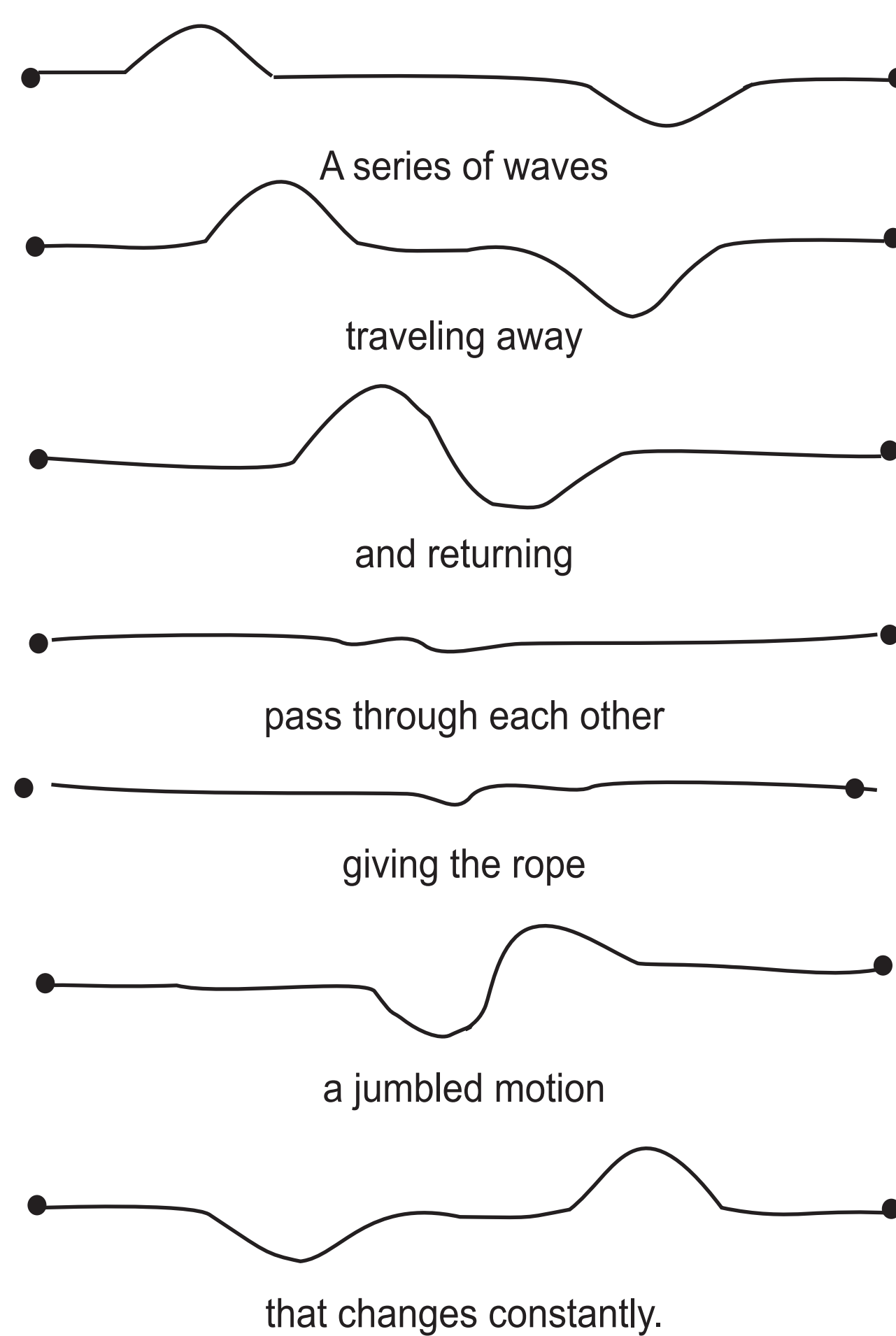


This wave may bounce back and forth several times before the motion fades away.

2.

REPEATED PULSES

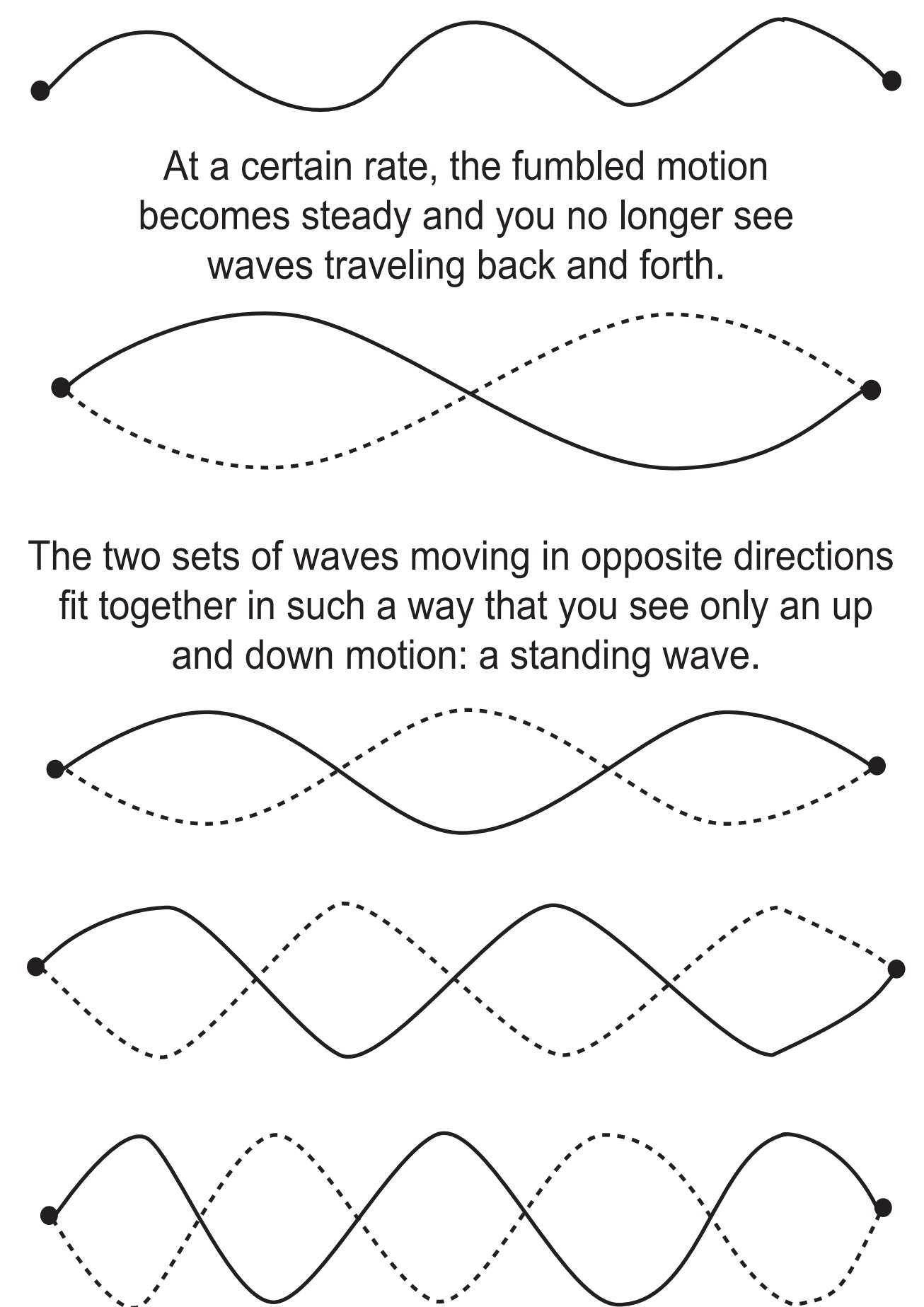
The waves follow each other along the rope, are reflected at the ends, and return.



3.

STANDING WAVES

Try changing the frequency of shaking, making it a little faster or slower.



The way the rope moves when it carries standing waves is the way a guitar string moves when it is set into vibration.