**Student-Snake Locomotion**

For each demonstration, student will form a line and stand with their hands on the shoulders of the person in front. The front person will be the head of the snake and guide movement.

**Rectilinear motion:**

[**https://www.youtube.com/watch?v=vnLDq8Lz5hg**](https://www.youtube.com/watch?v=vnLDq8Lz5hg)



*Movement is independent of surroundings.*

1. Head takes one step forward.
2. After the head has completed movement, 2nd person takes one step forward.
3. Process is repeated through the entire snake (line).
4. Head can only move forward again AFTER the person directly behind them has moved forward.

**Lateral undulation:**

[**https://www.youtube.com/watch?v=zEto1-ZTbd4**](https://www.youtube.com/watch?v=zEto1-ZTbd4)



*Movement of each section (except the head) requires an environmental contact.*

1. Head steps forward.
2. Each section behind can ONLY step forward if two conditions are met.
	1. Segment (person) in front of them is one step ahead of them.
	2. They are touching an object to their side with one hand.
3. Each segment (including the head) must be careful not to move too far ahead.
	1. Segments MUST remain connected at all times with at least one hand.
4. Repeat steps 1-3

**Concertina motion**:

<https://www.youtube.com/watch?v=a9y-C7LDpq0>

<https://www.youtube.com/watch?v=DYxjr605rxA>



*Movement requires each section (except the head) to be making an environmental contact on the opposite side as the segment in front of them BEFORE they can step forward.*

1. Every body segment (except the head) must touch an object next to them.
2. The side they are touching must be on the opposite side as the segment in front of them.
3. Once EVERY segment is touching an object, everyone can take one step forward.
4. Repeat, but you must touch an object on the opposite side as last time.

**Sidewinder motion:**

<https://www.youtube.com/watch?v=B3NbPUTD5qA>



*Movement is accomplished by sections of the snake getting thrown forward and approx. 60 degrees to its direction of travel.*

1. Head remains stationary
2. While remaining attached (hands to shoulders) the rest of the snake moves forward and to the side until 6 body segments are lined up to the side of the head but angled slightly back.
3. The 6th segment stops and tells the head to move.
4. The head begins to move forward.
5. Every segment moves forward following the path of the one in front of them.
6. The head moves forward until the last segment reaches the bend and begins moving forward again. They yell stop.
7. Head stops, repeats steps 2-6