

# A. Navigation

---

<b>General Symptoms</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Fever</li><li><input type="checkbox"/> Fainting</li><li><input checked="" type="checkbox"/> Fatigue</li><li><input checked="" type="checkbox"/> Weight loss</li><li><input type="checkbox"/> Weight gain</li></ul>	<b>Respiratory System</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Difficulty breathing with exercise</li><li><input type="checkbox"/> Difficulty breathing all the time</li><li><input type="checkbox"/> Chest pain</li><li><input type="checkbox"/> Wheezing</li><li><input type="checkbox"/> Asthma</li></ul>	<b>Circulatory System</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Rapid heart beat with exercise</li><li><input type="checkbox"/> Slow heart beat</li><li><input type="checkbox"/> Cold feet or hands</li><li><input type="checkbox"/> Chest pain</li><li><input type="checkbox"/> High blood pressure</li></ul>
<b>Digestive System</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Nausea</li><li><input checked="" type="checkbox"/> Vomiting</li><li><input checked="" type="checkbox"/> Abdominal cramps</li><li><input checked="" type="checkbox"/> Diarrhea</li><li><input type="checkbox"/> Constipation</li></ul>	<b>Muscles and Skeletal System</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Back pain</li><li><input type="checkbox"/> Leg pain</li><li><input checked="" type="checkbox"/> Muscle cramps</li><li><input type="checkbox"/> Swollen joints</li><li><input type="checkbox"/> Difficulty walking or moving</li></ul>	<b>Nervous System</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Confusion</li><li><input type="checkbox"/> Dizziness</li><li><input checked="" type="checkbox"/> Brain fog or difficulty concentrating</li><li><input type="checkbox"/> Headaches</li><li><input type="checkbox"/> Numbness</li></ul>

## **Notes:**

Patient complains that her stomach hurts after she eats meals, but has suddenly started losing a lot of weight. The patient says she often has diarrhea and stomach cramping. She has a hard time breathing when she tries to play basketball and gets out of breath quickly. Patient complains of feeling tired and weak all the time.

## B. Making Sense

---

1. How does a healthy body use food for energy?
2. How could a shortage of food entering M'Kenna's bloodstream have caused her other symptoms?

## C. Making Sense

---

What ideas have we figured out in Lessons 1-12 that our model needs to have?

Pull out your **Model Tracker**

## D. Individual Model Building

---

1. Build an initial model to explain: How does a healthy body use food for energy?
2. Once you have completed that, use a different color to add on your ideas about: How could a shortage of food entering M'Kenna's bloodstream have caused her other symptoms?



Add Lesson 13 - Student Handout to your science notebook. This is where you can record your initial model.

## E. Compare Models

---



### Turn and talk:

- What is similar and different about your models?
- What ideas do you all agree on and what ideas do you still have questions about?

Similarities between our models	Differences between our models

## F. Class Consensus Model

---



### **Share your ideas with the whole class**

- How does a healthy body use food for energy?
- How could a shortage of food entering M'Kenna's bloodstream have caused her other symptoms?

## G. Use the Model to Write an Explanation

---



### **Write an explanation**

- How does a healthy body use food for energy?
- How could a shortage of food entering M'Kenna's bloodstream have caused her other symptoms?

## H. Driving Question Board

---

What questions can we answer now?

What are we still wondering about?

# I. Navigation: New Ideas and Questions to Investigate Further

---



## Turn and talk:

- Does our model fully explain all of M'Kenna's symptoms?
- What do we still need to figure out?

# J. Navigation: New Ideas and Questions to Investigate Further

---

Why is M'Kenna losing so much weight?

- What are your initial ideas?
- What sort of data would we need to investigate this question?

>> Record your ideas in your science journal at home and come to the next class period ready to share them.