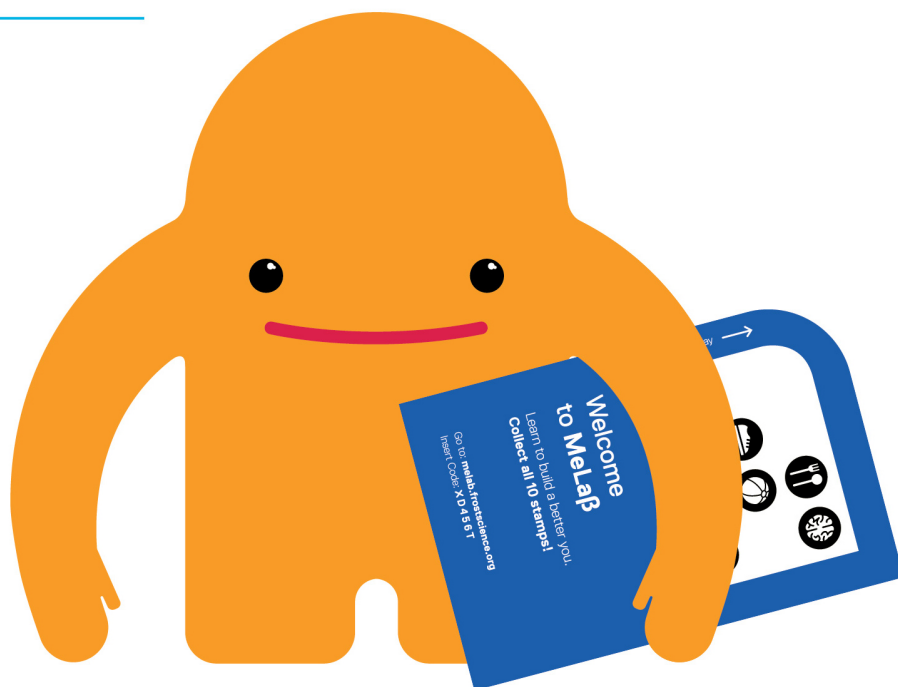




MeLaß

Grades K-2



Contents

Teacher Resource Guide	2
Pre-Field Trip Activity	5
Post-Field Trip Activity	11
Teacher and Chaperone Guide	15
Field Trip Exhibition Facilitation Cards	16

Questions? Ready to book your field trip? | Please visit: www.frostscience.org/fieldtrips



Overview

The **MeLaß** exhibition is an educational health and wellness experience where students can learn about the effects of their everyday choices on their mental and physical health. Focusing on the power of decision-making and goal setting, **MeLaß** allows each visitor to become the experiment through simulations that explore different outcomes, all while encouraging higher health awareness and improved conscious choices.

Educational Standards

Kindergarten

Science Big Idea 14 - Organization and Development of Living Organisms

- SC.K.L.14.1 Recognize the five senses and related body parts.

Health Education Big Idea 1 - Core Concepts

- HE.K.P.7.1 Identify healthy practices and behaviors to maintain or improve personal health.

1st Grade

Science Big Idea 1 - The Practice of Science

- SC.1.L.17.1 Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space.

Health Education Big Idea 1 - Core Concepts

- HE.1.C.1.5 Identify the correct names of human body parts.

2nd Grade

Science Big Idea 14 - Organization and Development of Living Organisms

- SC.2.L.14.1 Distinguish human body parts (brain, heart, lungs, stomach, muscles, and skeleton) and their basic functions.

Health Education Big Idea 1 - Core Concepts

- HE.2.C.1.2 Recognize the physical, mental/emotional and social dimensions of health.

Background Information

MeLaß visitors get to investigate their everyday choices through five zones (Eat, Move, Relax, Connect and Learn) that offer the latest health science and demonstrate the interrelated effects of their everyday lifestyle choices and activities. Each exhibit zone reveals how the body and mind function together, highlights related current research, showcases innovative medical technology, and shares what science has to say about the different outcomes due to changes in behavior. Students will be welcomed into a lively and vibrant space by a trained **MeLaß** facilitator, and will be able to explore together with their co-investigator, **βeta**, a digital character they get to personalize as they collect activity stamps and complete challenges in each zone.

The **MeLaß** zones:

- EAT:** Food is fuel for our bodies and our brains. Our digestive systems break down the food we eat into energy and nutrients. Our diets are influenced by external and internal factors including our emotions, social surroundings and physical environment.
- MOVE:** Our bodies need daily movement. Exercising regularly can have multiple physical and mental benefits including a stronger heart, a reduced risk of heart disease, and improved sleep and mood.
- RELAX:** Adults and children all experience different types of stress and have different ways to release that stress. Constant and unmanaged stress can have physical and mental health effects. Getting an appropriate amount of sleep is one way that each of us can adopt to let our bodies rest and recover.
- CONNECT:** Social connections are important, and the lack of social interaction and strong personal bonds can have negative effects on our physical and mental health. Technology has increased opportunities for us to connect, allowing ideas – but also disease – to spread further and faster than ever before.
- LEARN:** The connections in our brains are continuously shaped by our choices and experiences. Our daily behavior around diet, exercise, stress management and social interactions all impact our brain health.

MeLaß Exhibition Key Questions

- 🔵 What choices do you make every day that affect your health and happiness?
- 🔵 What factors in your social and physical environment influence your choices?
- 🔵 What choices or activities do you think you could change to feel healthier and happier?

Pre-Activity

See pages 5 - 10 for pre-activity instructions and presentation.

Field Trip Experience

All Museum field trips are a three-hour experience, offered Monday through Friday, beginning at 9:30 a.m. or 10:00 a.m. Each field trip includes three experiences of the teacher's choice and time for lunch. Upon arrival, the teacher will be provided with a specific schedule for his/her visit based on the three chosen experiences. Additional information regarding field trip logistics is provided in the field trip package that each teacher will receive upon booking of a field trip. For **MeLaß**, all students will receive a **MeLaß** activity card before entering the exhibition. This card is a central part of the exhibition experience. Teachers and chaperones will be provided with a **MeLaß** instructional guide (please see page 15).

During the field trip, students will encounter a variety of experiences. To enhance these learning opportunities, facilitator cards are provided at arrival for all teachers and chaperones who would like to use them (please see pages 16 - 20 for a sample). The facilitator cards include prompting questions, additional content, and exhibition location maps which show where in the exhibition one can find content related to that card.

Post Activity

See pages 11 - 14 for post-activity instructions and presentation.

Select Recommended Extensions

Grade K: My Senses Tell Me...

<http://www.cpalms.org/Public/PreviewResourceUrl/Preview/3749>

Grade 1: Squeaky Clean

<http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47117>

Grade 2: Analyzing Human Body Parts

<http://www.cpalms.org/Public/PreviewResourceLesson/Preview/37985>

Pre- and Post-Field Trip Resources

Pre-Field Trip Activity: See, Think, Wonder (A Visual Thinking Routine)

Overview

Students will participate in a visual thinking process to stimulate curiosity about health. The routine encourages students to look and think carefully about why something can look or behave a certain way. Students will make observations about health and happiness, prompted by four images, and are then encouraged to answer questions about what they see, what they think, and what they wonder about the images.

Objective

Students will observe different images to identify what they know and what they are curious about, related to the topic of health and happiness.

Materials

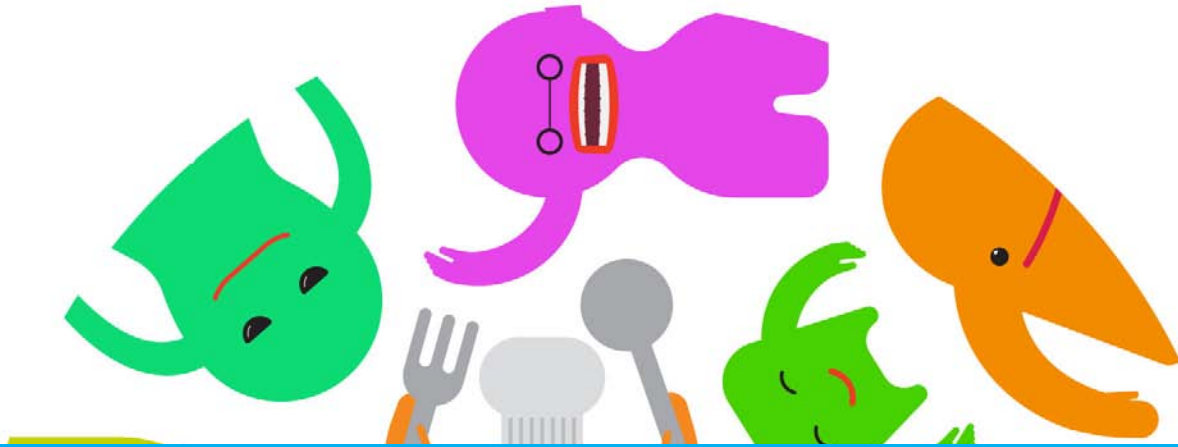
- Computer, white board and projector
- *Optional: sticky notes*
- MeLaß Grades K-2 Pre-Field Trip Presentation (pages 6-10)

Activity Steps

1. Test the presentation on your computer: open the document, go to "View" on the menu bar, then click the full screen option ("Enter Full Screen" or "Full Screen Mode").
2. Use the presentation to guide the activity.
3. *Optional: Have students write or draw their responses on sticky notes and add to a chart labeled, "See," "Think," and "Wonder" at the top. Please see sample chart on page 10 for reference.*
4. Conclude with a class discussion about health and happiness and what they may see during their field trip.

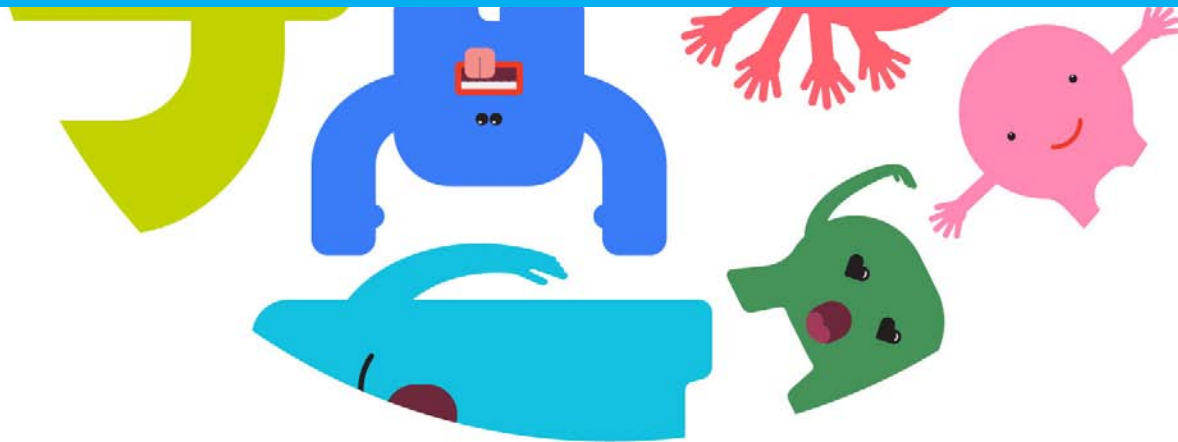
Helpful Hints

- For the facilitation of the "I see..." component, it can help to remind the students to only point out what they see (imagine they can put their finger on it, e.g. a person, a pillow, etc.), and not to jump ahead to the "I think..." component.
- The pictures used align with the concepts of the five zones (Eat, Move, Relax, Connect, and Learn) outlined in the background information of the Frost Science MeLaß Teacher Resource Guide. Some pictures represent more than one zone.
- Responses to the images may range from being focused on the five zones to another topic. Guide the conversation towards the topic of health and happiness with "I see..., I think..., I wonder..." statements, e.g. "I see a boy asleep. I think he was very tired. I wonder if he is getting sick."
- Facilitators may also choose to write down the "I see..., I think..., I wonder..." statements and refer back to them in the class discussion. If you do this, you will need to provide additional supplies to record the answers.



Frost Science | MeLaß Pre-Field Trip Activity | K - 2ND Grade

SEE - THINK - WONDER





| See...



👉 Describe only what you see in these images.



I Think...



- Describe what you think is going on in these images.
- What makes you say that?



I Wonder...



What do these pictures make you wonder?

Sample Pre-Field Trip Chart

SEE 	THINK 	WONDER ??
<p>Friends!</p> <p>HAPPY</p> <p>blue</p> <p>girls racing</p> <p>PEOPLE</p> <p>friends</p> <p>dad a bad</p> <p>sleeping</p> <p>A comfy bed.</p> <p>I see cooking</p> <p>Babies</p> <p>comfy Bed</p> <p>boys and girls</p> <p>A Dad too busy with his son</p> <p>a tired kid</p> <p>A dad and boy cooking</p>	<p>Kids playing in the park</p> <p>making cookies</p> <p>Boy giving friend a hug.</p> <p>I think the boy likes the girl</p> <p>Boy is sleeping.</p> <p>Girl making a cake</p> <p>sleeping is awesome</p> <p>I think they are having a race</p> <p>The boy is tired</p> <p>cooking with Dad</p> <p>I think kids are finishing a race</p> <p>These girls are winning</p>	<p>When is naptime?</p> <p>Why did the boy hug the girl?</p> <p>Is it healthy food?</p> <p>How did they meet?</p> <p>I wonder what he's dreaming?</p> <p>What is she saying to him?</p> <p>Was he really tired?</p> <p>When did he go to bed?</p> <p>What are they cooking?</p> <p>What were they playing at?</p> <p>What are they making?</p> <p>is he sick?</p>

Pre- and Post-Field Trip Resources

Post-Field Trip Activity: "I Used to Think... But Now I Think..." (A Visual Thinking Routine)

Overview

After the field trip, students reflect on what they have observed, explored and learned. Students will complete the "I Used to Think... But Now I Think..." Visual Thinking Routine. This activity can be used when students' initial thoughts, opinions, or beliefs are likely to have changed or expanded as a result of an experience. The students can also share and explain their shifts in thinking as a group for further learning opportunities.

Objective

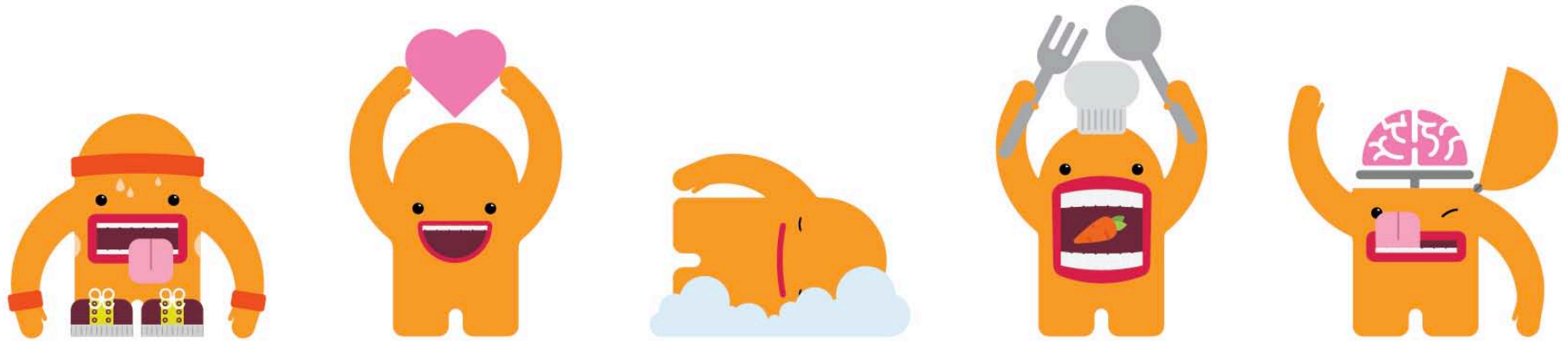
Students will reflect on their experience at Frost Science and how their thinking about health and happiness has changed.

Materials

- Computer, white board and projector
- *Optional: poster paper*
- Sticky notes – provide two different colors, if possible
- MeLaß Grades K-2 Post-Field Trip Presentation (pages 12-14)

Activity Steps

1. Draw a chart on the white board (*or poster paper*) for students to post their ideas.
2. Test the presentation on your computer: open the document, go to "View" on the menu bar, then click the full screen option ("Enter Full Screen" or "Full Screen Mode").
3. Give each student several sticky notes, or the facilitator can write down the answers for the students.
4. Use the presentation to guide the activity.
5. Conclude with a class discussion about the completed chart and their experience at the museum.



Frost Science | MeLaß Post-Field Trip Activity | K - 2ND Grade
I USED TO THINK...BUT NOW I THINK...



How has your thinking changed?



- What did you think about health and happiness BEFORE the field trip?
- What do you think about health and happiness NOW?

Sample Post-Field Trip Chart

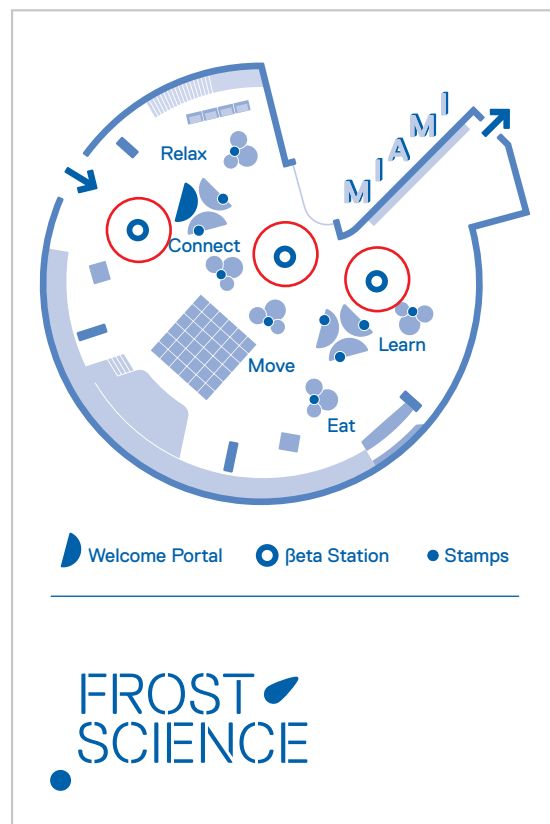
I USED TO THINK...	BUT NOW I THINK...
doctors are scary	An apple is good + yummy
Exercise was only running	Exercise can be any moving activity!
I used to think I was healthy	Now I think I need to eat healthier foods
I used to think sleep wasn't that important	now I think I need to sleep more
vegetables are not tasty	doctors help us get better
only germs can make you sick	What's his bedtime?
I didn't need to sleep much	Crash food is good for my brain
How I feel didn't matter.	vegetables provide healthy fats and vitamins
watching TV all day is very good	I need to sleep 8 hours
Exercise hurts to do it	watching TV all day is not good for the health
only exercise mattered for health.	Exercise can make you happy
McDonalds is yummy	Friends matter for health too.
	That my feelings matter to my health.

Teacher and Chaperone Guide

- Give each student a MeLaß card.
- Use MeLaß card to collect activity stamps in each zone.
- Scan the card at a β eta Station to create a profile and customize a β eta.
- Keep exploring the zones and checking back in at any β eta Station to unlock accessories.
- Keep card and use unique code to log in online after visit.



Front of MeLaß card.



Back of MeLaß card.

CHECK IN

CONNECT

Ask:

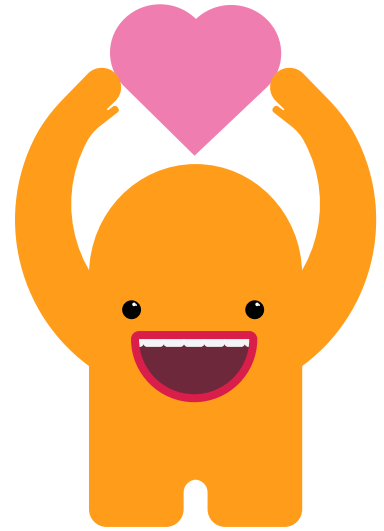
How do you stay connected with others?

Some possible answers include...

- I talk to friends and family members.
- I use social media.
- I have dinner or lunch with others.
- I am part of a team or a club.

Say:

Long-term **loneliness** has been shown to be as bad for your health as smoking or obesity. Talking, listening and even quiet time with others can help you stay connected and improve your **mental and physical health**.



FROST SCIENCE | MeLaß FIELD TRIP



FLOOR PLAN

● CONNECT

CHECK IN

RELAX

Ask:

What happens to your body when you get stressed? Feel relaxed?

Some possible answers for "stressed" include...

- I get nervous.
- I sweat.
- I start breathing more and more heavily.
- My heart beats faster.

Some possible answers for "relaxed" include...

- I feel happier.
- I have more energy.
- I sleep better.

Say:

We all experience stress, there is no avoiding it! Learning to manage stress by relaxing has both physical and mental benefits. Next time you feel stressed try taking four deep breaths. You may notice your heart rate and breathing slowing down and you may feel more calm.



FROST SCIENCE | MeLaß FIELD TRIP



FLOOR PLAN

● RELAX

CHECK IN

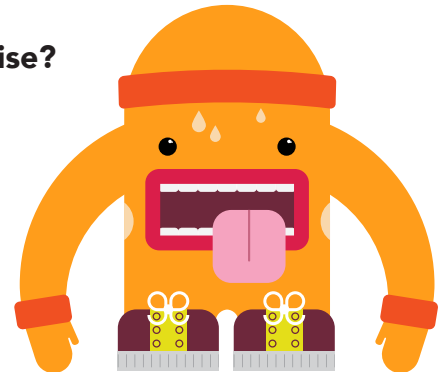
MOVE

Ask:

What happens to your body and your brain when you exercise?

Some possible answers include...

- My heart speeds up.
- I start breathing more and more heavily.
- I burn calories (energy).
- I feel happier or more relaxed afterward.
- I am more likely to be able to concentrate afterward.



Say:

When you exercise, your **heart** and **lungs** need to work harder to deliver more oxygen and blood throughout your body. **Moving** your body regularly helps improve your mood, memory and helps your bones and muscles get stronger, including your heart – it's also a muscle!

FROST SCIENCE | MeLaß FIELD TRIP



FLOOR PLAN

● MOVE

CHECK IN

EAT

Ask:

What happens to your body when you do not get enough food (fuel/energy)? When you eat too much?

Some possible answers for "not enough" include...

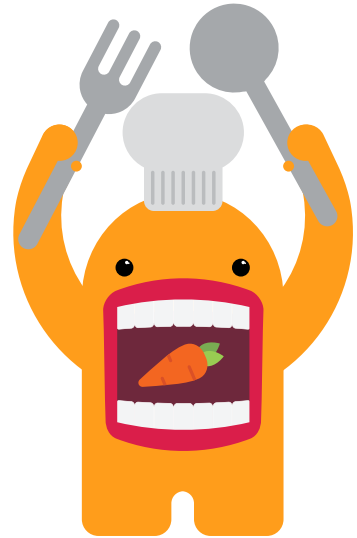
- I get moody.
- I feel tired or sleepy.
- I don't have enough energy.

Some possible answers for "too much" include...

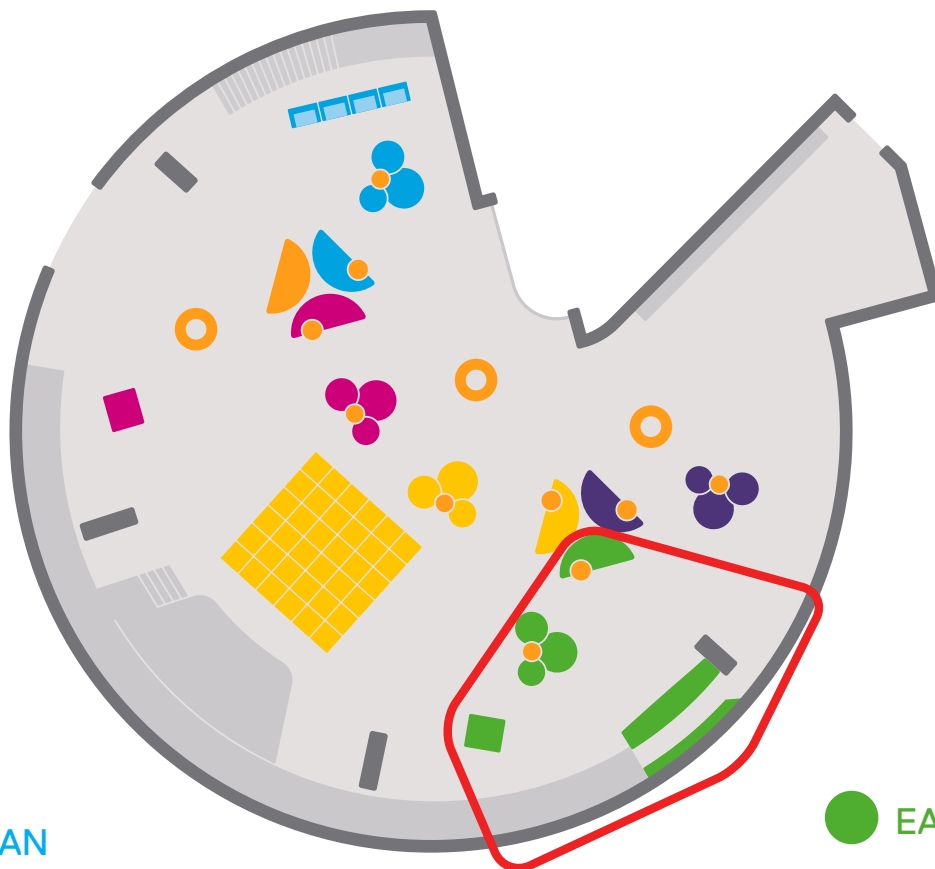
- I feel drowsy.
- I find it hard to concentrate.

Say:

Food is **fuel (energy)** for your body. All foods have different amounts of **calories** and nutrients. Our diets need a **balance** between how much we eat and how much energy we use as well as a balance of carbs, proteins, and fats.



FROST SCIENCE | MeLaß FIELD TRIP



FLOOR PLAN



CHECK IN

LEARN

Ask:

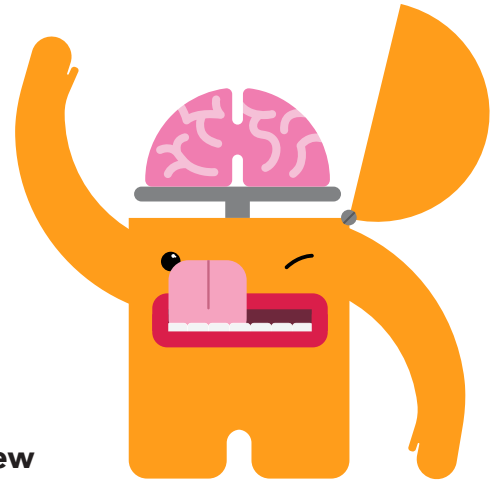
Healthy brain = healthy body! How do you keep your brain active and healthy?

Some possible answers include...

- I keep studying and learning.
- I exercise.
- I don't smoke!
- I eat healthy food.

Say:

Everything you do involves your brain! Every **experience** and **new activity** you have **shapes** your brain. This means that eating, exercising, learning, social connections and relaxing are all linked and important for keeping a healthy and active brain.



FROST SCIENCE | MeLaß FIELD TRIP



FLOOR PLAN

● LEARN