



Solid Tumors

to help understand a tumor diagnosis

The goal of the Solid Tumor Learning Lab is to provide an interactive, hands-on experience using materials children can manipulate and explore. This activity encourages repetition and recall— important strategies that aid in a child’s learning and development.

It is designed to be a supportive tool for children affected by solid tumors, as well as those who have a caregiver, grandparent, peer, or other loved one with a solid tumor diagnosis.

The activity will have the biggest impact when a child is engaged. The steps do not have to be followed exactly as outlined. If your child takes the activity in another direction, join them. You can always gently nudge them back to the activity steps. If they continue to create their own path, that is okay, follow along with their adventure and you can try to reintroduce the activity at a later time.

You can always expand on this activity by adding in more play-doh colors to represent different cells and their jobs OR use other craft supplies - glue/tape, sequins, pom-poms, markers - to allow the visual to remain in place for the child to refer back to.

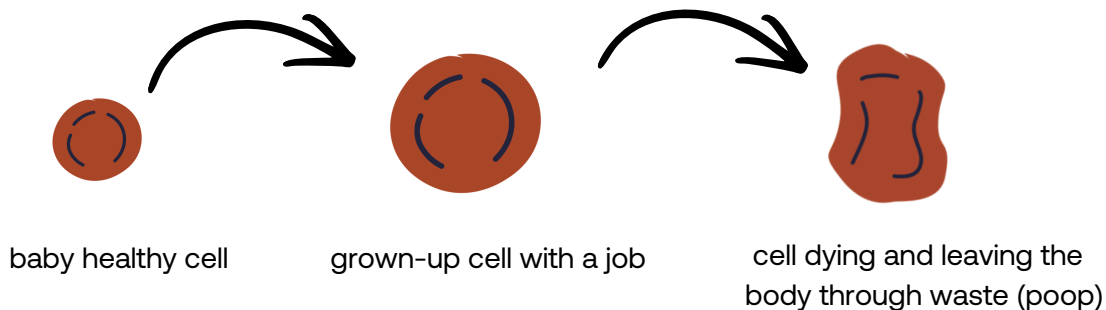
Solid Tumors

to help understand solid tumor diagnoses

Healthy Cells

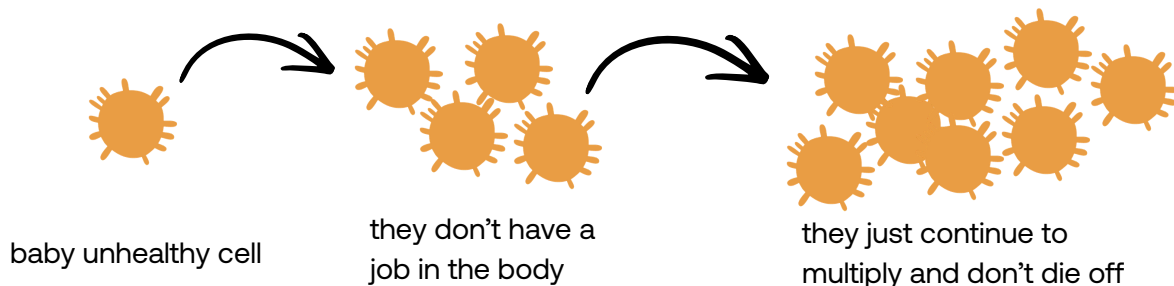
- Cells are things that make up every part of our body, the outside and inside.
- Cells are so small you cannot see them.
- Cells all have unique jobs that work together to keep our body healthy.

Our body makes baby cells that grow up and have specific jobs that help keep us healthy and strong. The grownup cells can multiply or make copies of themselves, but they only make as many copies as the body needs. Then, when the grownup cell is done with their job, they die, and new cells are made to take over that job. When a cell dies our body breaks it down and it leaves the body as waste (poop).



Unhealthy Cells

Sometimes, a cell is made and it looks and acts differently than a healthy cell. These unhealthy cells don't participate in any jobs in the body and they don't die like healthy cells. Instead they multiply quickly and make a lot of copies of themselves.



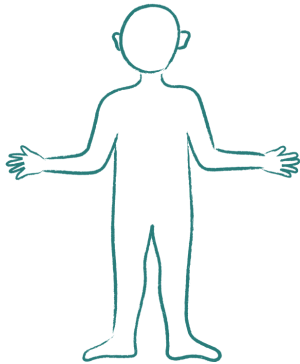
Solid Tumors

Tumors are formed when a group of unhealthy cells clump together. Because our body is made up of cells - the insides and outsides - tumors can form anywhere in the body. These unhealthy cells are also called cancer cells.



Materials

Human Body Art



Play-doh [3 colors]



Healthy Cells:

Outside Cells: **Blue Play-doh:**

Skin Cells

Skin cells provide a protective barrier against your body getting hurt and germs getting inside your body; they help your body stay cool or keep warm; and they tell your brain when your skin feels something - soft, sting, hot.

Inside Cells: **Red Play-doh:**

Red Blood Cells

Red Blood Cells carry nutrients, vitamins, and oxygen to your entire body. They also give you energy to run, jump and play.

White Blood Cells

White Blood Cells fight off germs and help to keep your body healthy.

Platelets

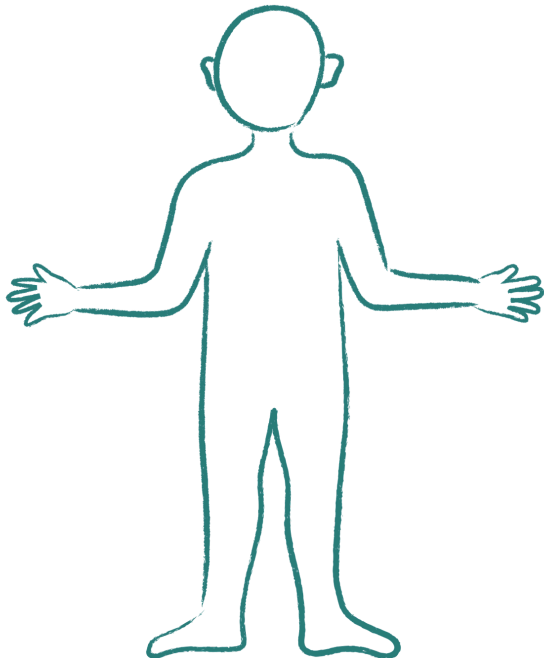
When your body gets hurt, platelets join together to form a seal or scab to stop bleeding and help your body heal.

Unhealthy Cells:

Cancer Cells: **Yellow Play-doh**

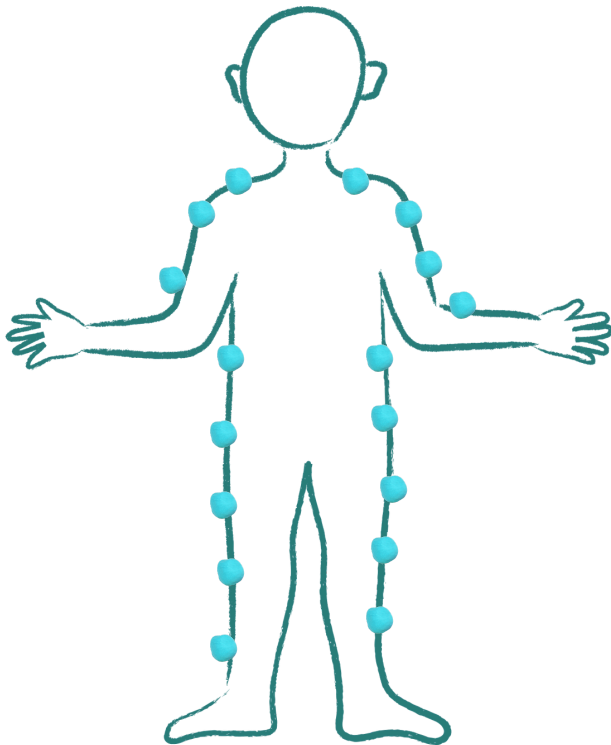
Unhealthy cells do not have a job and instead of dying they make more unhealthy cells very fast.

Instructions



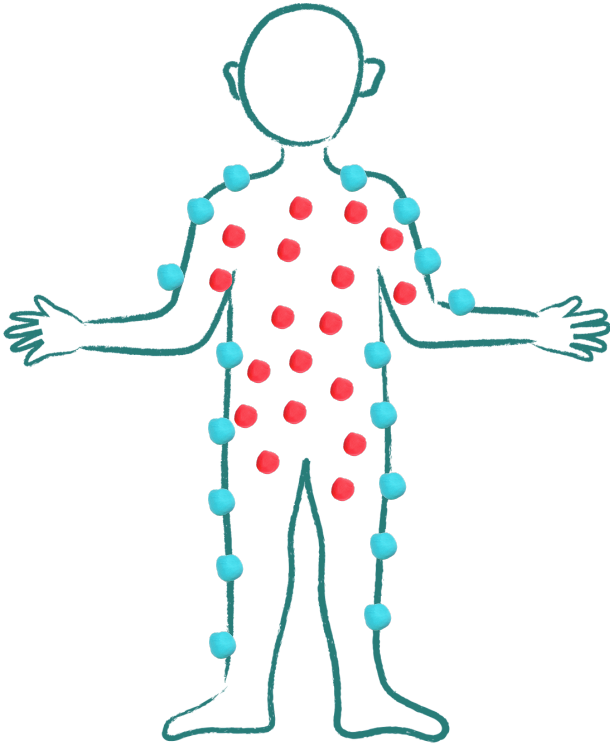
step 1

Draw or print the outline of an adult or kid body.
*This part can be simple or get very creative.
*Printable human body available in last page of packet.



step 2

Roll blue play-doh into tiny balls and put them along the outside, or outline, of the body.
*Talk about the job of the skin in keeping the body healthy
*Introduce (or draw) other outside body parts and explain how they are made up of cells - toe cells, eye cells, hair cells

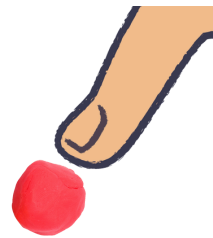


step 3

Roll **Red** play-doh into tiny balls and put them on the inside of the body.

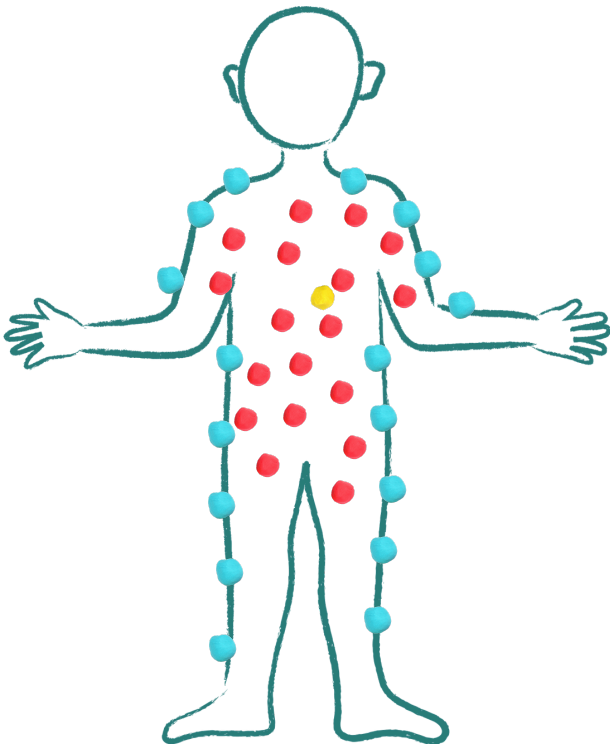
*Talk about the different jobs that blood cells have in keeping the body healthy

*Introduce (or draw) other body parts inside the body, and explain how they are also made up of cells - heart cells, stomach cells, brain cells - especially in area where a solid tumor has formed.



step 4

Practice flattening one inside or outside cell at a time to demonstrate a cell dying, remove that cell, and introduce a new, healthy cell.

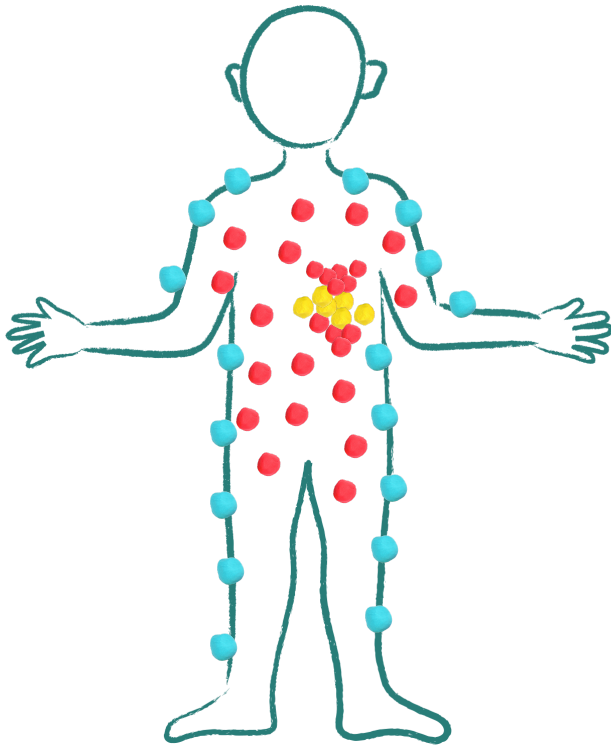


step 5

Roll the **Yellow** play-doh into ALOT of tiny balls.

*Start with one yellow cell inside the body

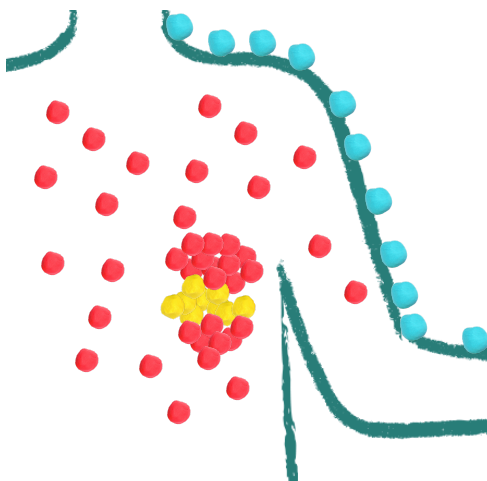
*Talk about how the yellow cell is the unhealthy cell that doesn't have a job.



step 6

Add more and more **Yellow** play-doh balls together in one area of the body.

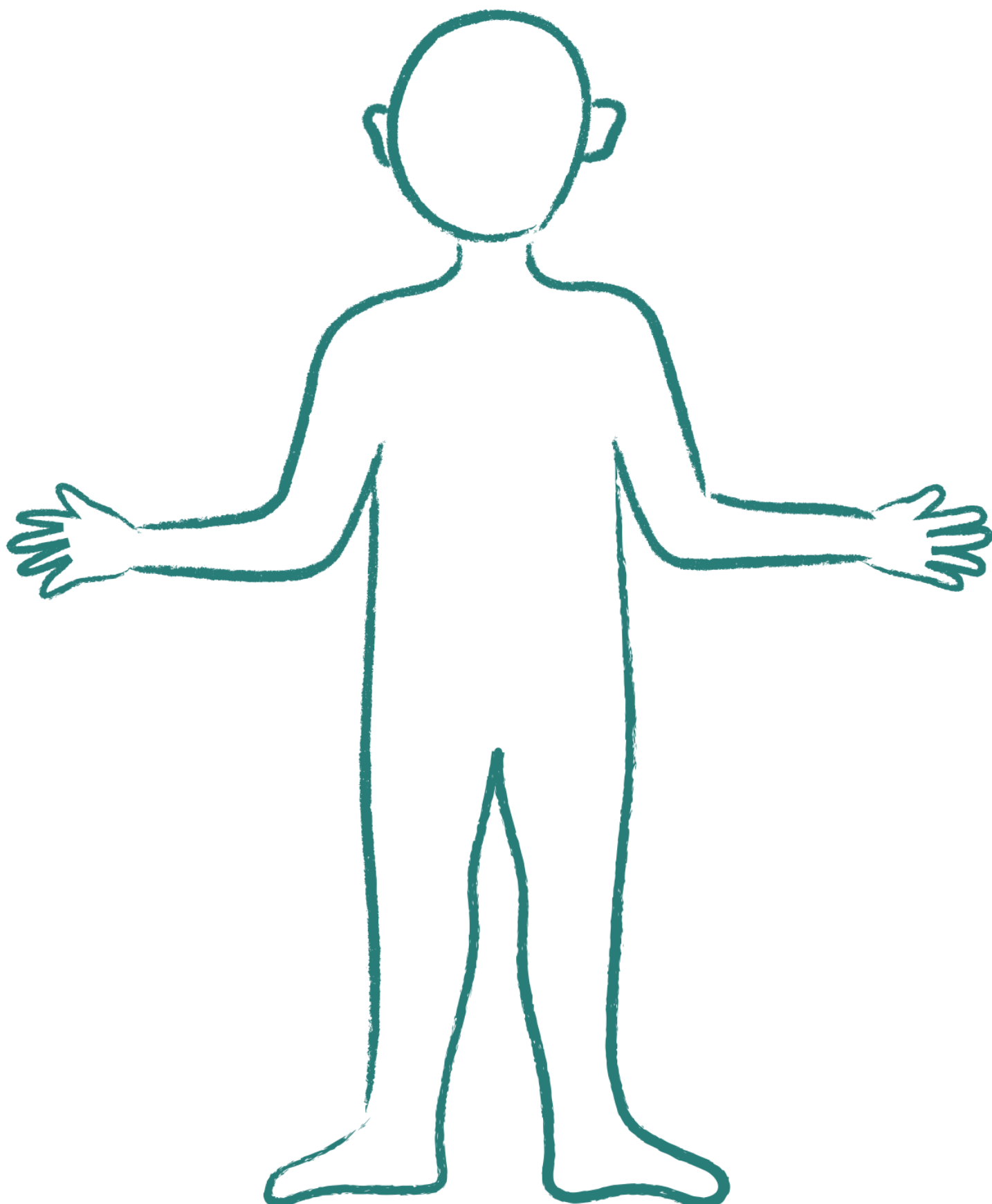
*Talk about how the unhealthy cells are clumping together and forming a tumor.

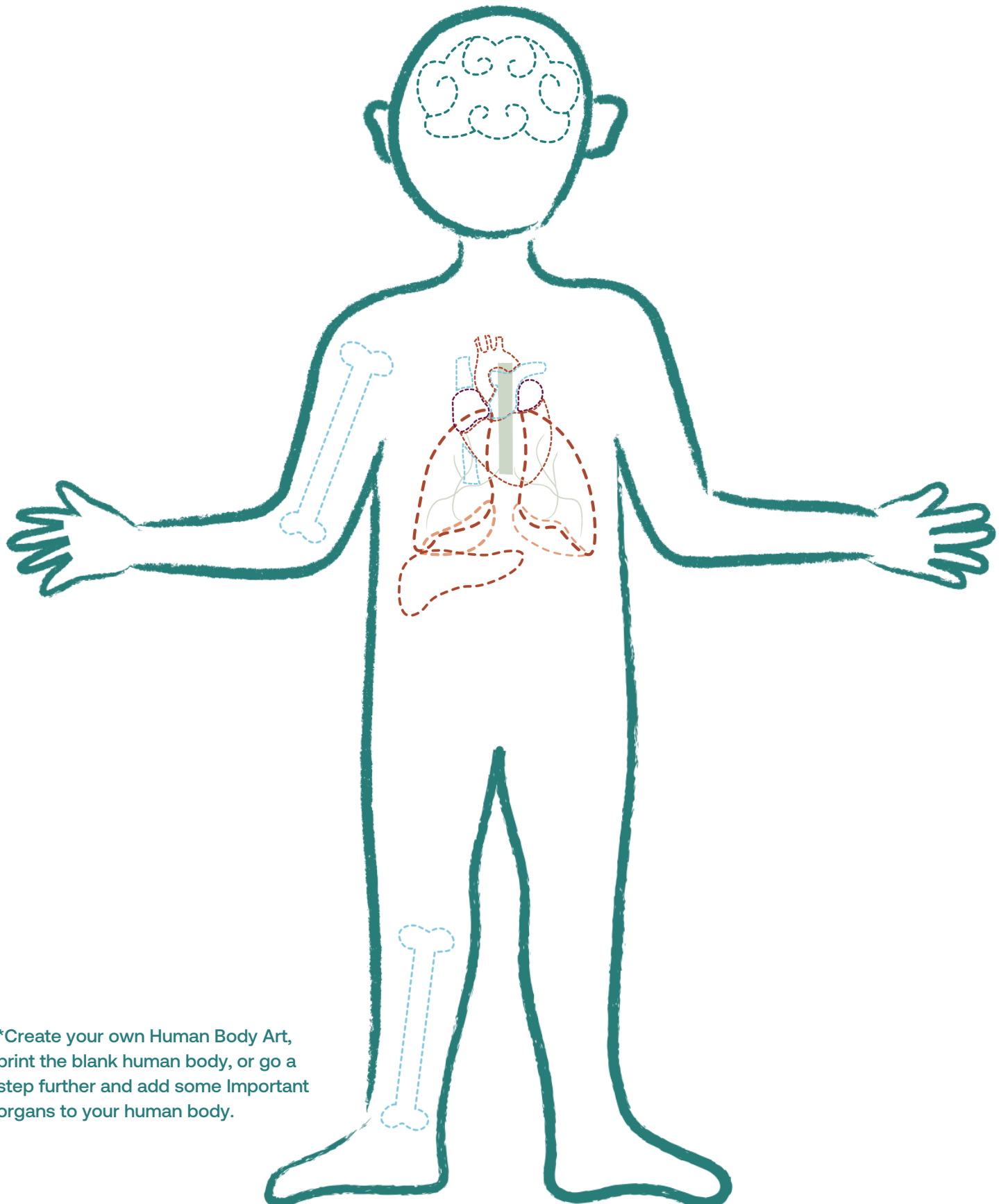


step 7

Demonstrate how the tumor blocks the healthy cells from moving through the body to do their jobs.

*Talk about specific side-effects they have observed that can happen when healthy cells are blocked by a tumor.





*Create your own Human Body Art, print the blank human body, or go a step further and add some Important organs to your human body.

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