

Child Life Department
Palm Beach Children's Hospital

## All About My fMRI

Come and learn about fMRI with me



#### What is an fMRI?

An fMRI is a big camera that takes pictures of your brain activity. The doctor wants to see what parts of your brain activate or "light up" when you do certain things like talk or tap your fingers.

There is more oxygen in the part of the brain being used, and that is what the computer can see.

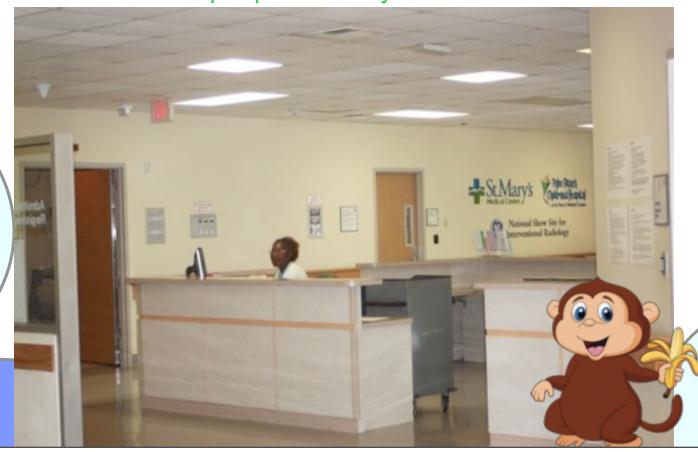


## Where will I go for my fMRI?

#### Radiology

You will go to a place in the hospital called radiology

The people are very nice here ©



#### What will I have to do?

We are going to need your help with a few things!



You will need to take off all jewelry and remove metal out of your pockets before having an fMRI.



#### What will I see?

**fMRI** Machine



This is the fMRI camera!

The most important thing to remember is that the camera will not touch or hurt you.

## What else will I have to do?





You will have to lay down on a long bed and the nurse will put a helmet over your head.

Remember the helmet will not touch or hurt you and the nurse will always be with you.

#### Who will I meet?

The person who takes your picture will watch you through a window or TV screen, so you're never alone.



If you get scared or feel unsafe, you can press the button the technician gives you and they can talk to you or stop the machine.

#### What will I hear?

**Loud noises** 



You may hear loud noises while the fMRI takes your picture. Some kids say it sounds like a tunnel, a rocket ship or a washing machine It is very loud! But remember the machine will not hurt you.

# What will I be doing during my fMRI?



The technician will ask you to do some tasks during your fMRI.

Don't worry...you can not mess up.

Just remember to listen very carefully to the instructions.

It can actually be pretty fun!

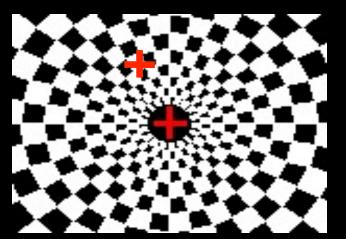
We will practice the tasks together first and then you can do them on your own later!

#### Visual Task

Always look at the small '+'.

The '+' may be the only item on the screen.

Sometimes the `+' will be on top of flashing checkerboards.

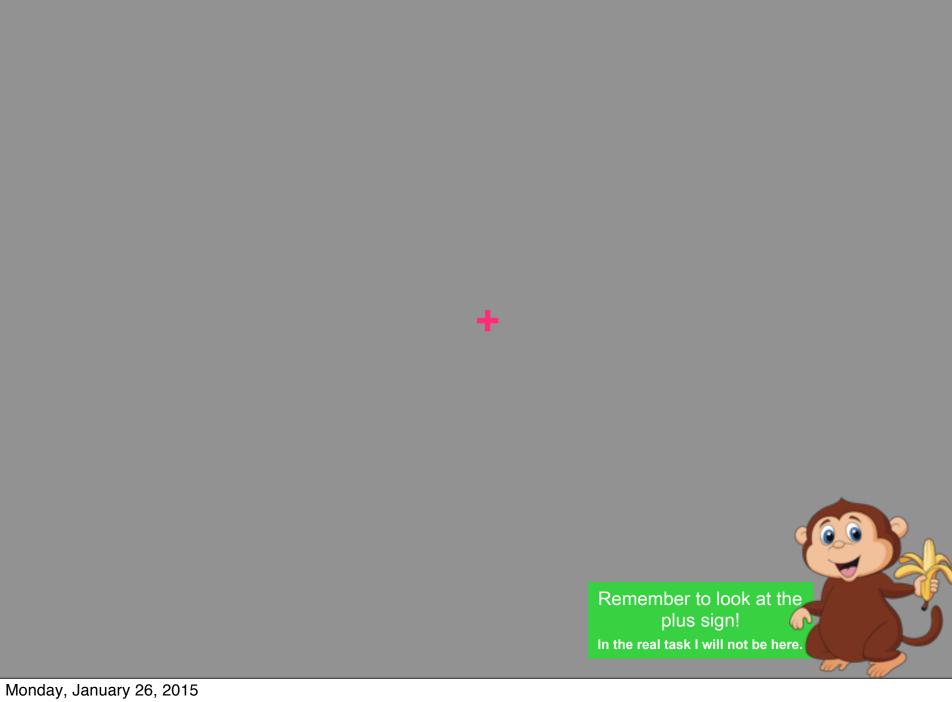


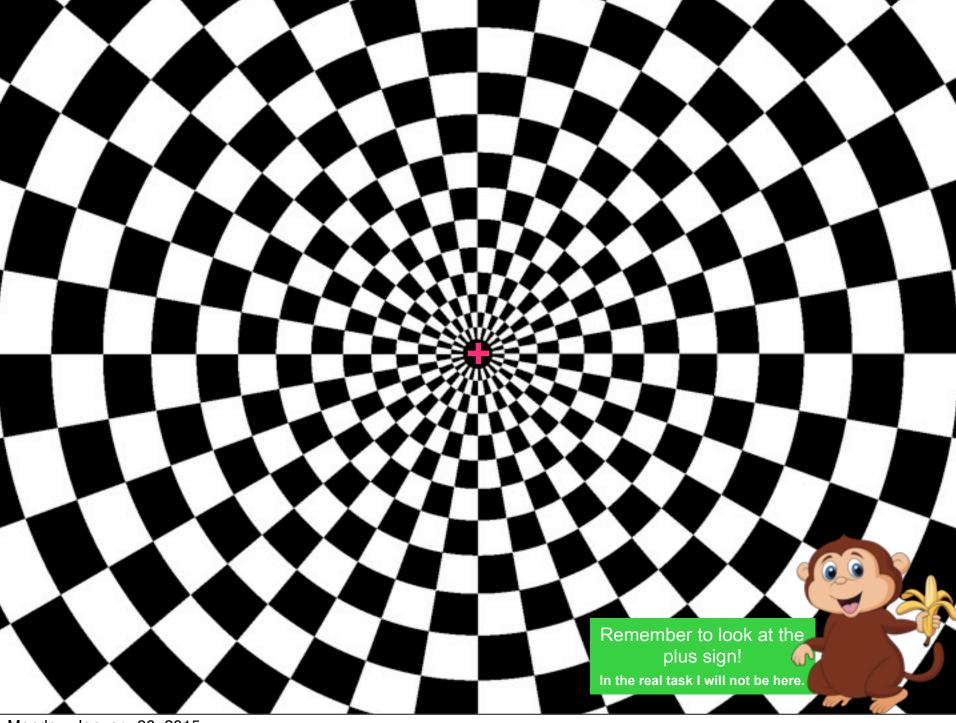
Are you ready to practice with me?

In the real task I will not be here.



Keep looking at the '+' the whole time,





Monday, January 26, 2015

#### Visual Motor Task

#### There are 2 tasks:

#### – Motor:

- Tap your fingers while you see the picture of a hand.
- DO NOT move any other part of your body.

#### – Visual Flashes:

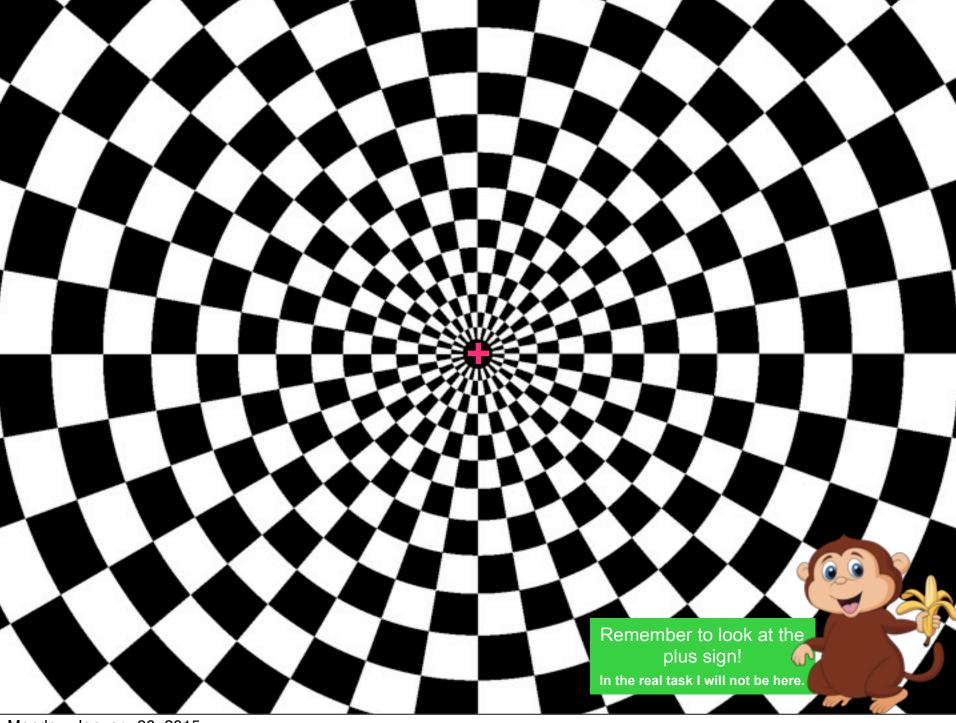
- After a while, the hand disappears and it is replaced by flashing checkerboards.
- Keep your eyes open and focus on the "+"



Try to keep your head still all the time.



When you see the hand, tap your fingers!
In the real task I will not be here.



Monday, January 26, 2015

### Finger Tapping

When you see:



Rest

When you see: fingers



Tap y

Keep your eyes open the whole time.

Keep the rest of your body still.



When you see the hand, tap your fingers!
In the real task I will not be here.



This means stop tapping your fingers. In the real task I will not be here.

#### **Foot Movement**

When you see:



Rest

When you see: toes.



Wiggle your

Keep your eyes open the whole time.

Keep the rest of your body still.



When you see the foot, wiggle your toes!
In the real task I will not be here.

### Lip Movement

When you see:



Rest

When you see: your lips.



Move

Keep your eyes open the whole time.

Keep the rest of your body still.





When you see the mouth, move your lips In the real task I will not be here.



This means stop moving your lips.

In the real task I will not be here.

#### Auditory Task – Word Listening

First you will see a yellow cross like '+' and only hear the scanner noise.

Then you will hear a series of words.

Listen to the words and try to understand them. The words may not be very clear, this is normal.

Keep looking at the '+' the entire time.

Try to keep still.

#### **Word Generation Task**

Rest but keep your eyes open when you see a yellow cross '+'.

If you see a single letter on the screen, try to think of as many words as you can that begin with that letter.

Only think at the words, do not say them loud, do not move your mouth or your lips.

Try to keep still.



Look at the plus sign, when you hear words just listen to them.

In the real task I will not be here.



Look at the letter and try
to think of as many
words as you can that
start with the letter.
In the real task I will not be here.



Rest and look at the plus sign.
In the real task I will not be here.

Look at the letter and try
to think of as many
words as you can that
start with the letter.
In the real task I will not be here.

#### Verb Generate Task

When you see #### just rest: do not think at any word or sentence.

When you see a noun (an object word): think of a verb (action word) that you can associate with it.

Examples:

See Think

Clothes → Wash

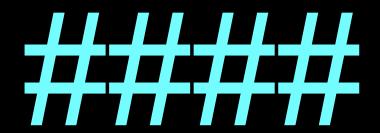
Cards → Play

Horse → Ride

Think the words silently to yourself do not say them out loud.

Do not move your mouth or your lips

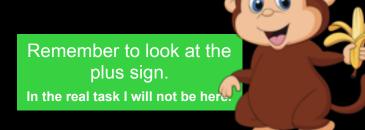
Try to keep still.



Rest, just look at the # signs.

In the real task I will not be here!



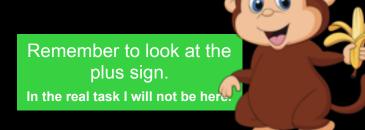


# ball

When you see a word, think about an action that goes with it.

In the real task I will not be here.



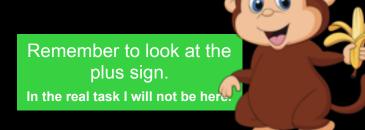


## CUP

When you see a word, think about an action that goes with it.

In the real task I will not be here.





#### Sentence Completion Task

 Rest but keep your eyes open when you see a series of nonsense letters.

Example: Fkoniwe kasd iepaw akd \_\_\_\_dfe.

 If you see an English sentence, read it to yourself and think of a word that fits into the blank.

Example: Young cats are called \_\_\_\_\_.

Don't speak out loud, don't move your mouth or lips.

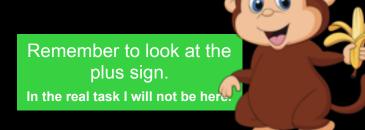


# Rdse sdkln seke leweo lskd.

When the words don't make sense just look at them.

In the real task I will not be here.

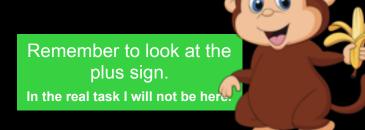




# People usually have toes.







### Little Bo Peep lost her

When the words make sense, complete the sentence.

In the real task I will not be here.

### Object Naming Task

Rest and relax when you see:



Try to relax and do nothing. Do not say to yourself the name of the object on the screen.

When you see the picture of an object like:



Think at the name of the object

Try to keep still.



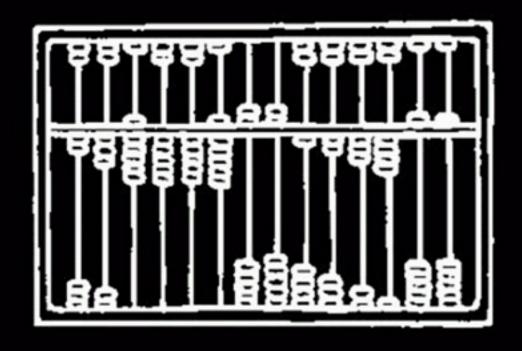






Think about the name of this object.

In the real task I will not be here.



Think about the name of this object.

In the real task I will not be here.



