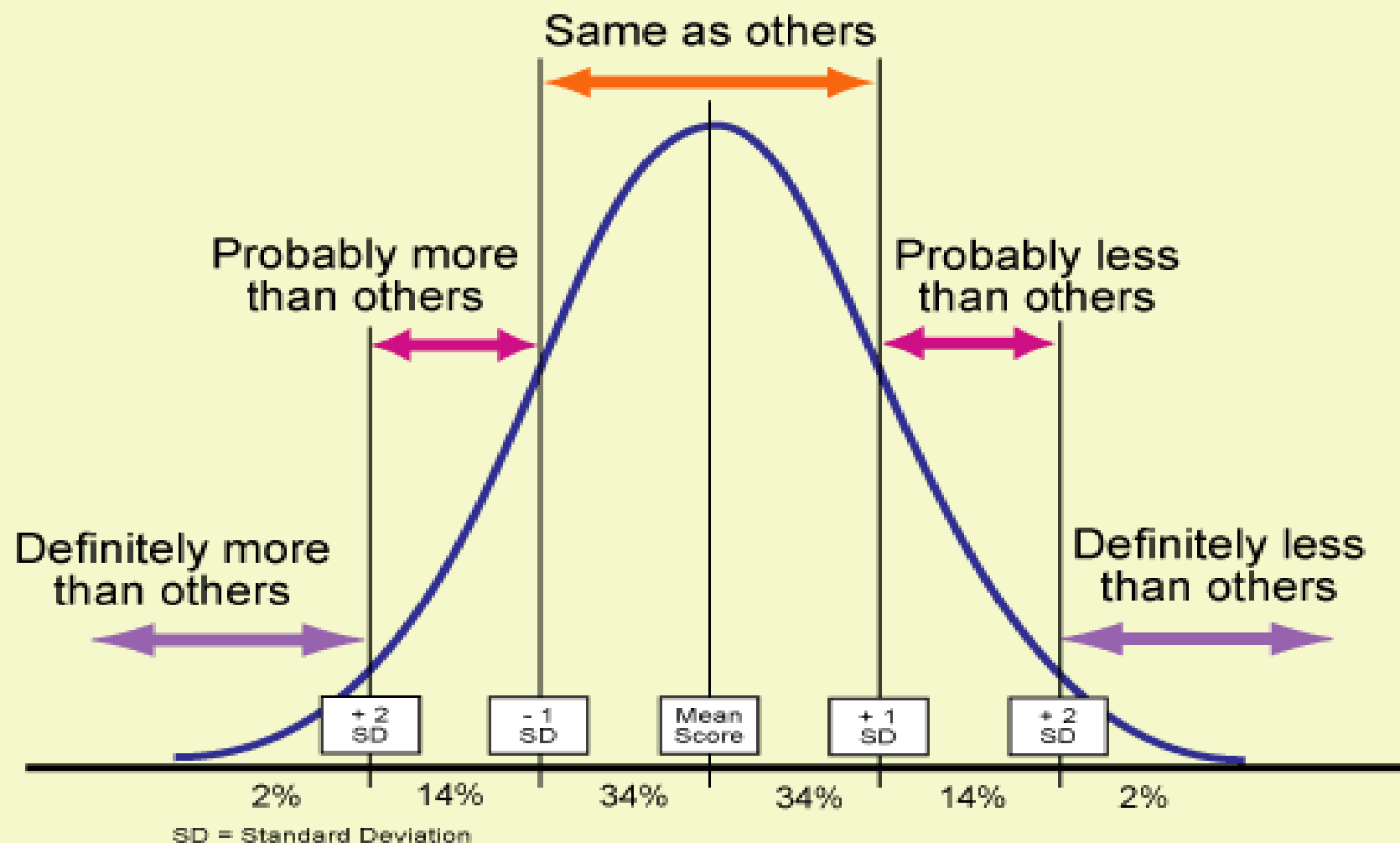


Executive Function Skills

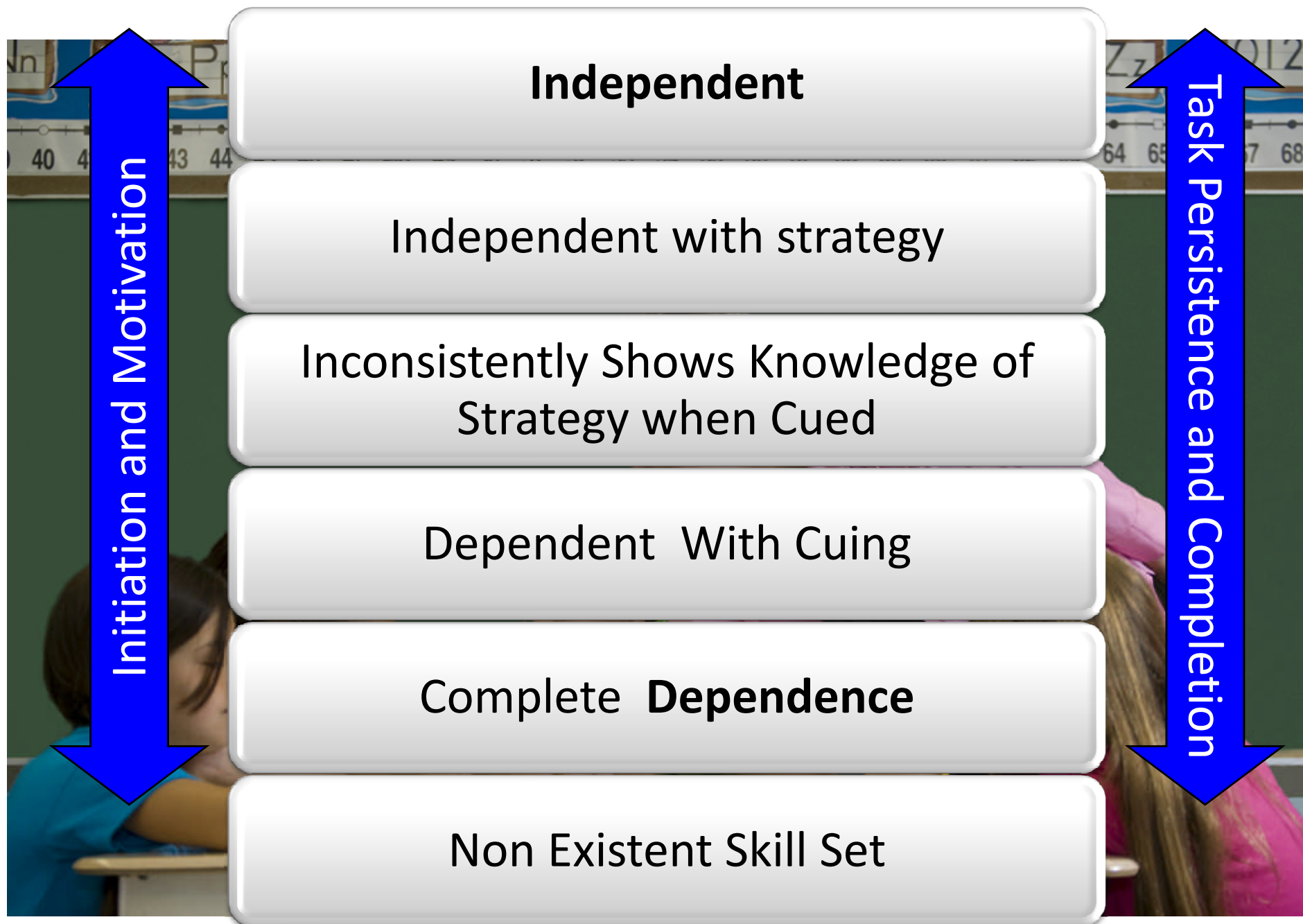
Sarah Ward, M.S., CCC/SLP
Speech and Language Pathologist





THE BELL CURVE

JIM M. GOLDSTEIN - JMG-GALLERIES.COM



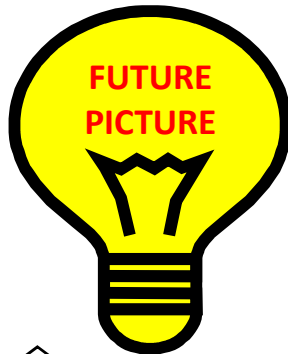
A Visual Model of the Executive Skills

**Easily Recognize What the Problem is
and Intervene at the Critical Moment of Parenting or Teaching**



'Executive Functions' Flowchart:

Aware



Set a
reasonable
goal

Tap into
knowledge base
and Notes to Self
(Episodic Memory)

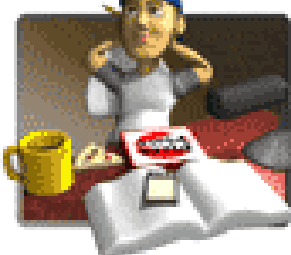
Derive a **plan**,
break the plan
into manageable
parts and
organize to
achieve the goal

**Visualize the Future: Use
Forethought!**

If things are not going as
planned, then you need to :

- Evaluate** why and plan
- Generate several
alternative solutions**

Hindsight



Self Monitor and Evaluate

- is the plan being successfully
implemented?
- Is the goal in fact achieved?

Inhibit (Stop)

Initiate (Start)

Passage of Time

Being Aware



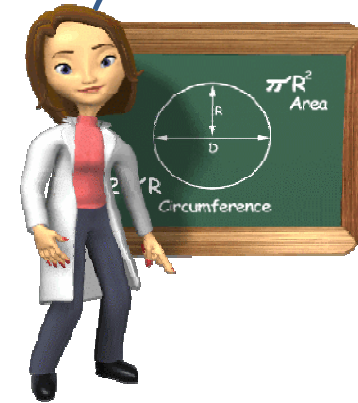
Translate Bedtime routine:

- **time** – after dinner, before breakfast
- **sequence** – bath before pajamas
- **space** – in my own home, upstairs, bathroom, bedroom
- **materials** – pajamas, toothbrush, washcloth, etc.
- **people** – need dad to read a story, need mom to brush out my hair

To cooking routine:

- **time** – prep time, cooking time, clean up time
- **sequence** – mix before bake
- **space** – in the kitchen
- **materials** – ingredients, recipe
- **people** – help turning on the stove

School Schema



"I'm almost done with lunch. (space)
I have science next. (time)
We always have to turn in our homework on
her desk before she lectures. (sequence)
I need to get my homework, science book
and ruler! (objects)
Mrs. Johnson is a real tough teacher. I will
lose points if it is handed in late!" (people)



STOP and Read the Room

Space

Read the Room

•What's going on?

Time

Get on the Timeline

- Pace

- Time of day

- What is happening at this Moment** in Time

- What is coming up?
 - Predictable sequence

Objects

Read the Object

Parts
Location
Purpose

People

Read the Person

Face
Body
Appearance
Mood
Pace
Saying

“Clean your
room.....”

“Okay!”



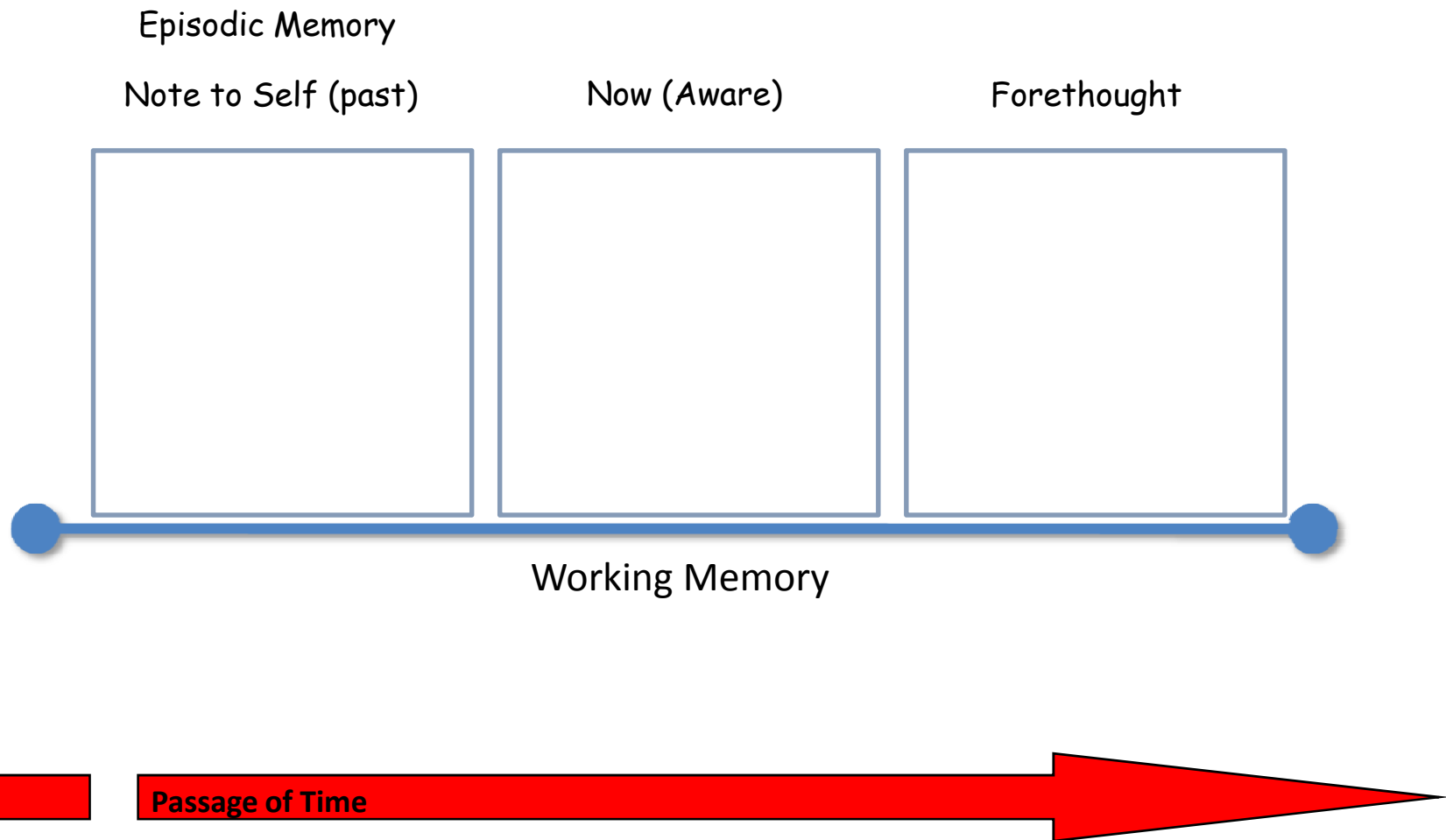
Are told to clean your room -
you have no method

“Clean your
room……”



“Let’s see.
I need to go to my room and
clean. (space)
It will only take about 10
minutes. Then I can go over to
Andrea’s. (time)
First I’ll pick up the cd’s, then the
dirty clothes and put away my
books. That will do. (sequence)
I need a trash bag. (objects)
Maybe Mom can bring me my
clean clothes. (people)”

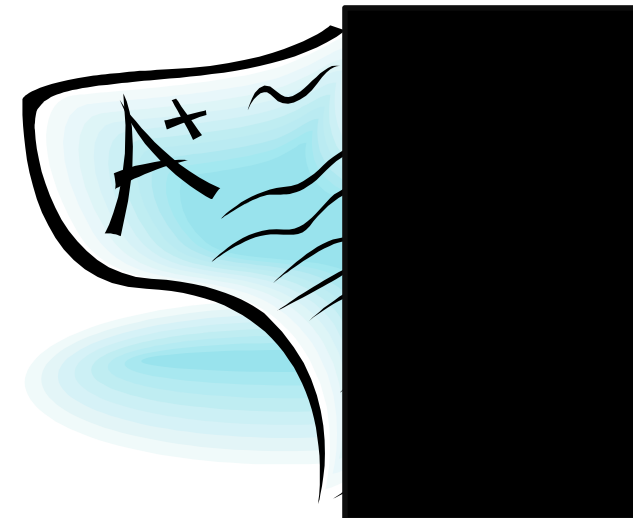
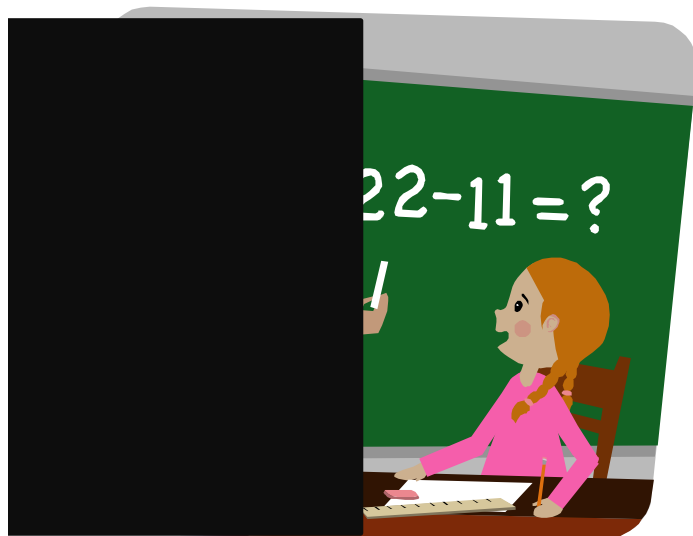
Working Memory and Processing Speed Traps



Note to Self (past)

Now (Aware)

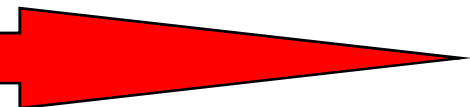
Forethought

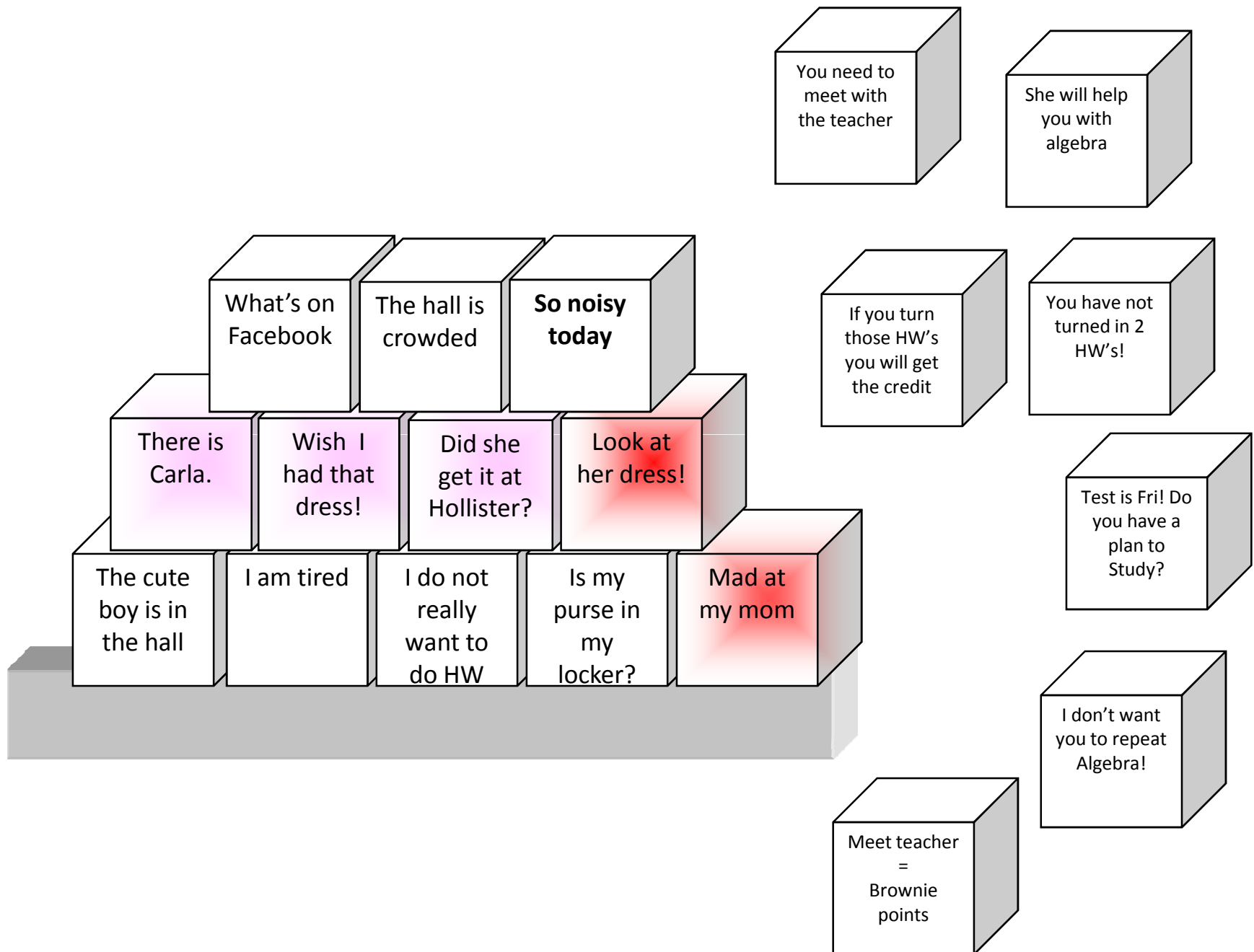


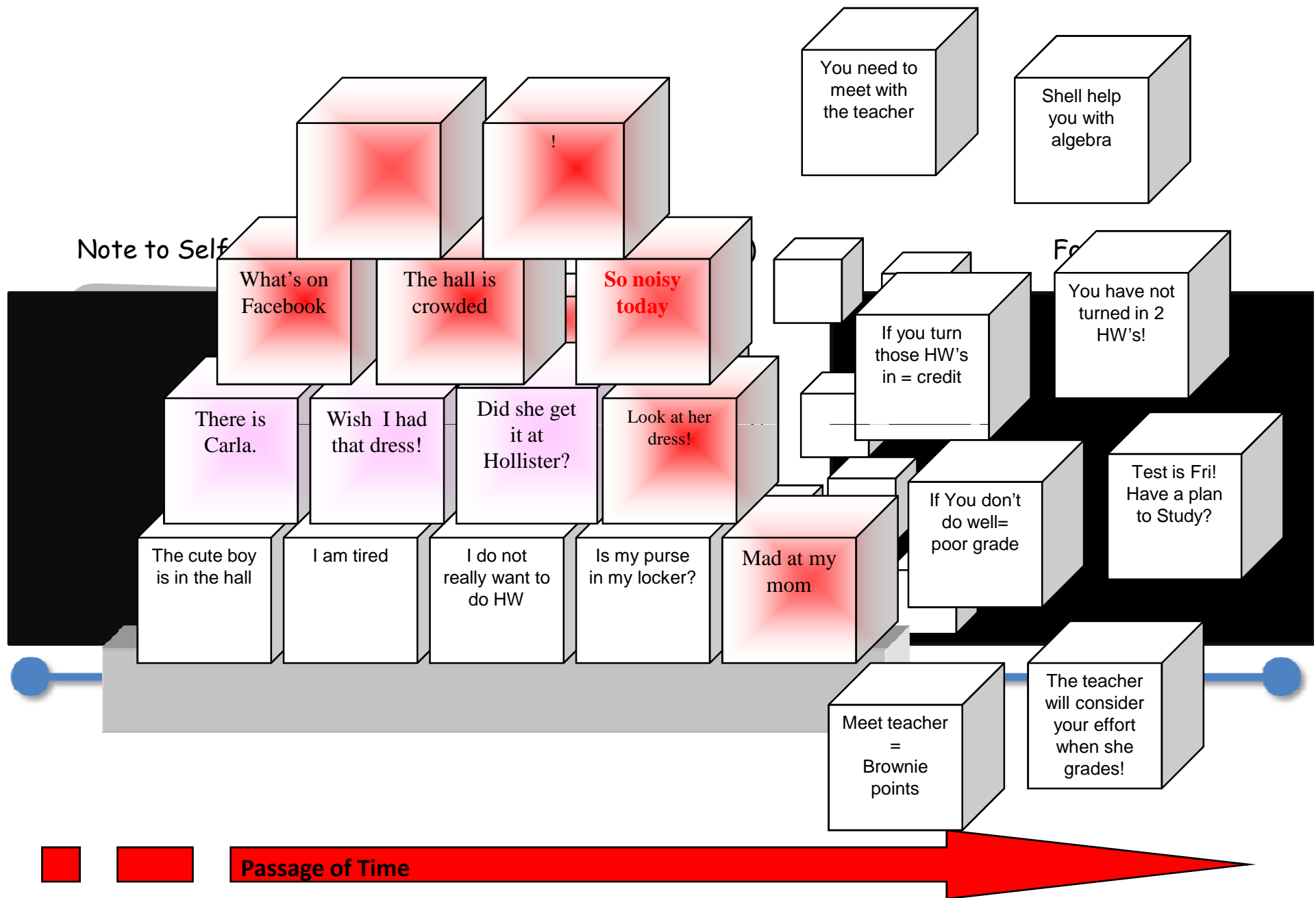
Working Memory

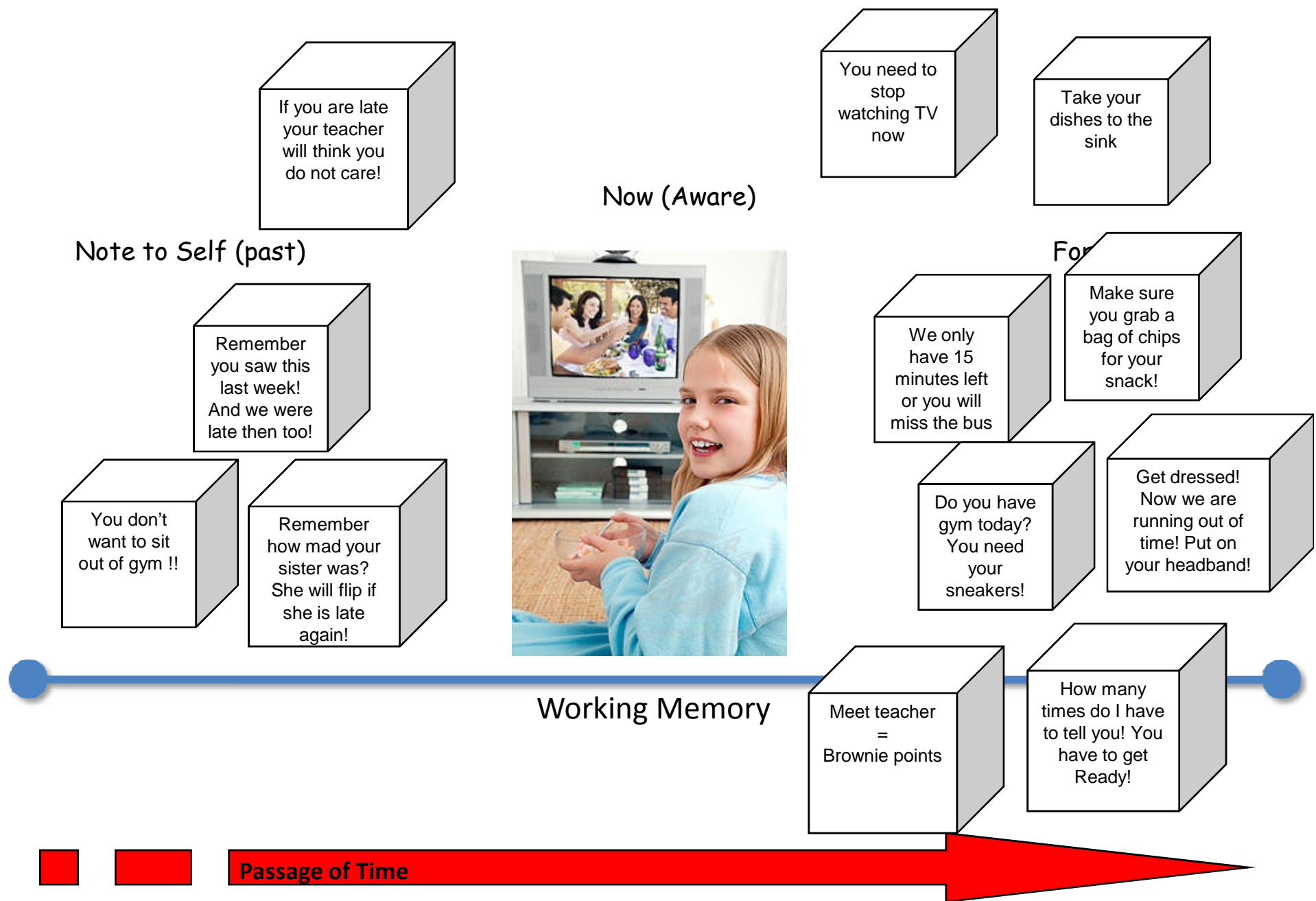


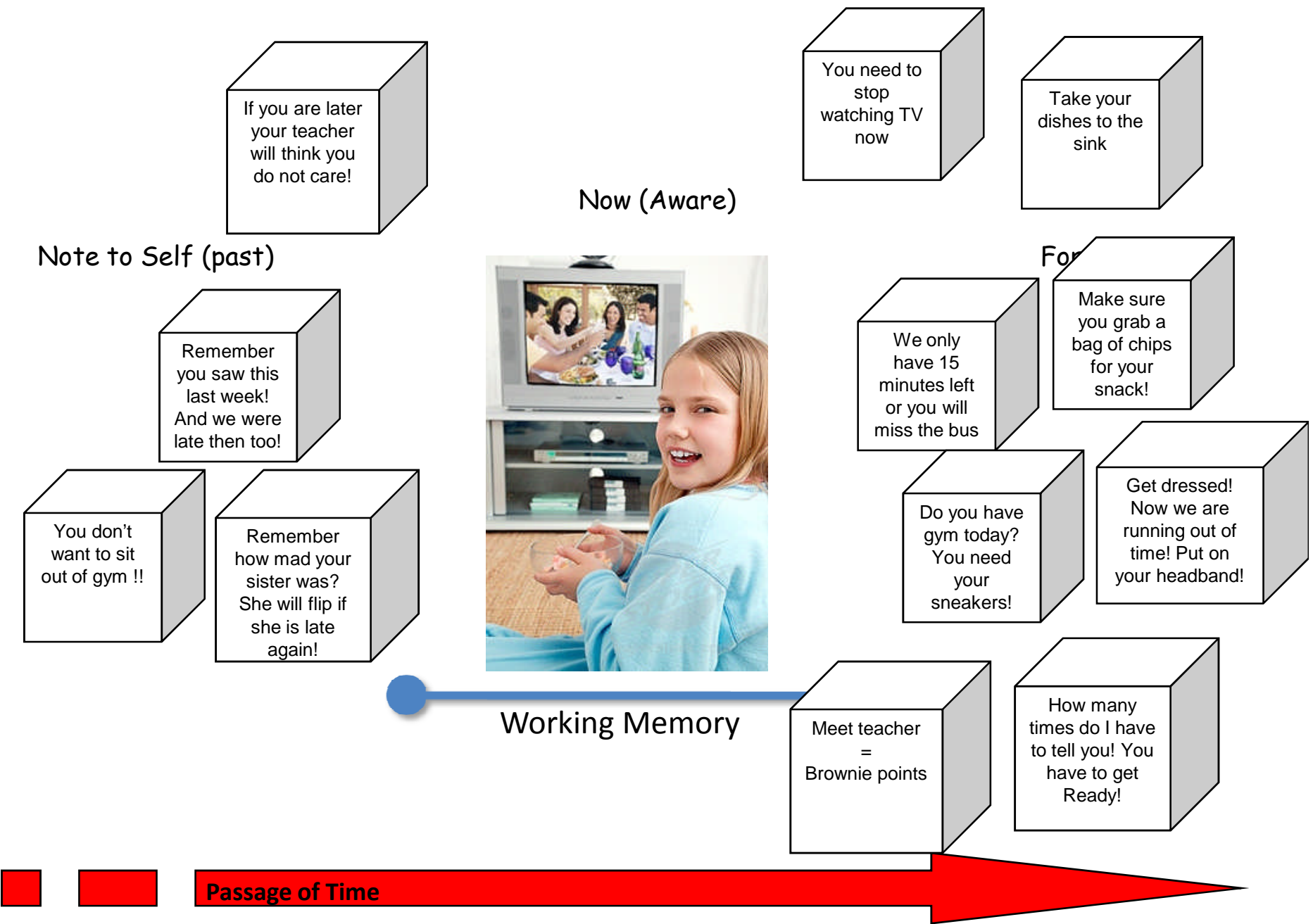
Passage of Time











The Hierarchy of Task Execution

Is the Student Aware? Are they Reading the Room?

Do they have a Future Picture?

Do they Know and Sense the Passage of Time?

Are the Key Features Organized in their Mind?
(Big Picture → Features → Details)

Have they accessed any Notes to Self?

Do they recall last Time how Things Worked Out?

Do they have a Plan for managing the steps, the time
and the materials?

How do they initiate best?

Strategies

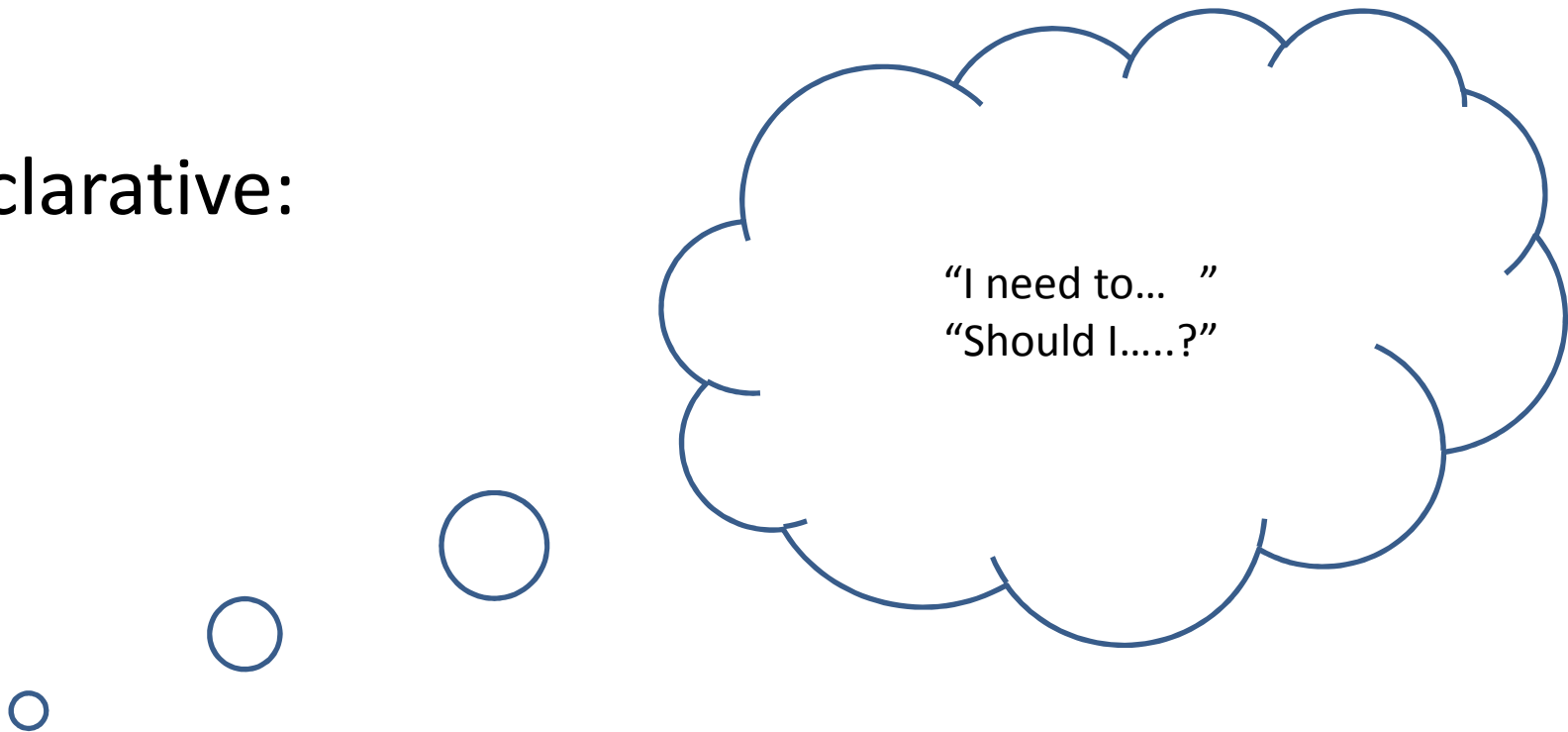
- Strategies to improve executive function skills are designed to:
 - Cue the forethought of a behavior
 - Access Hindsight
 - Build in the sense of the passage of time
 - Show the sequence of steps
 - Create/Cue up a consistent underlying structure to reduce ‘thinking demand’ on working memory



Imperative vs Declarative

Imperative: Command

Declarative:



Strategies:

Use Declarative Language:

Humph.....

Hmmm...

I've noticed that....

How do you know when....

Declarative Language

- The type of language used when one is communicating what the mind is producing.
 - “I need to...”
- Allows us to do “small talk”.
 - “She just said she got her nails done. I went this weekend with my mom too!”
- Requires the brain to integrate information from multiple sources
 - Integrating body language, tone of voice, 3 peers, ‘where in the four square game’ we are, my own idea
- Allows us to learn and process ‘online’ in an integrated fashion
 - *I can* learn and think at the same time. So I will add this comment about the Colonists....

Don't cue to do

→ cue to know what to do

- We are graphing today. Take out your math book, calculator, ruler and worksheet.
 - “If you were ready for math what would your desk look like?”
- You can't go to the bathroom right now or you will be late to math!
 - “How long do you think it will take to go to the bathroom? Is that enough time to come back and be on time to class?”
- Can't you see I have the table half set for dinner? We are going to eat soon. Do not put the craft box there!
 - “How are you going decide where to set that up?”
- Get off the computer right now! No you can't play just one more level! How many times do I have to ask?
 - “If it were a good stop spot, what would you and I see?”

Example:

Nicole's father is outside in the yard moving large river rocks from the driveway to the yard as part of a large landscape project.

Nicole, has discovered her old bike from last year in the garage; but it is rusty and looking quite worn.

She brings the bike to her dad (who is sweating profusely in the humid Massachusetts summer sun and is muttering under his breath –staring at the LARGE pile of rocks still left to be moved -- how heavy and difficult it is to move these rocks).

“Dad! Dad! I need you to get the rust off my bike so I can ride it! Come on! Let's get the rust remover!”

Imperative Commands	Get out of the driveway! Can't you see I'm hauling these very heavy rocks! Put your bike away! No way can we do that now!
Suggestions without Explanations	Please do something else now. Roller blade instead.
Suggestions with Explanations	If I do your bike now I'll never get these rocks done! I'm too busy with rocks. Put your bike in the lawn and we will do it later....maybe.
Declarative – Problem Solving	Hmmm HOW DO I LOOK right now? How MIGHT I feel about doing that now? If it were a GOOD TIME how would the driveway look? When would it be a good time LATER for me to do that? What can you think of to do NOW while you wait?

**adapted from Raising a Thinking Child Workbook, by Myrna Shure*

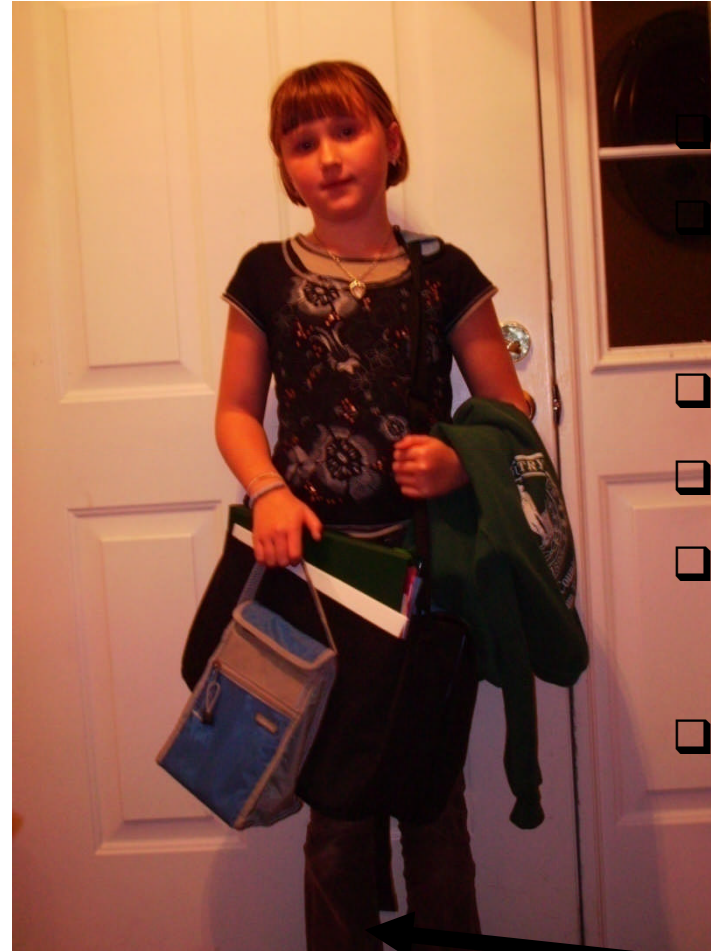
The Visual Schema Strategy

**Visualize the Future→ Picture the Outcome→
Match the Mental Picture**

- We **SEE** the final product/outcome/place behavior...
.....DO THEY?
- Talk less...
- Use Language that evokes visual imagery
- Right Brain vs. Left Brain



"We have to go! Are you ready for school?"



"Head to Toe!"

- ☐ Head Band
- ☐ Sweatshirt/
Coat
- ☐ Snack
- ☐ Bag
- ☐ Homework
Notebook
- ☐ Shoes for
Gym

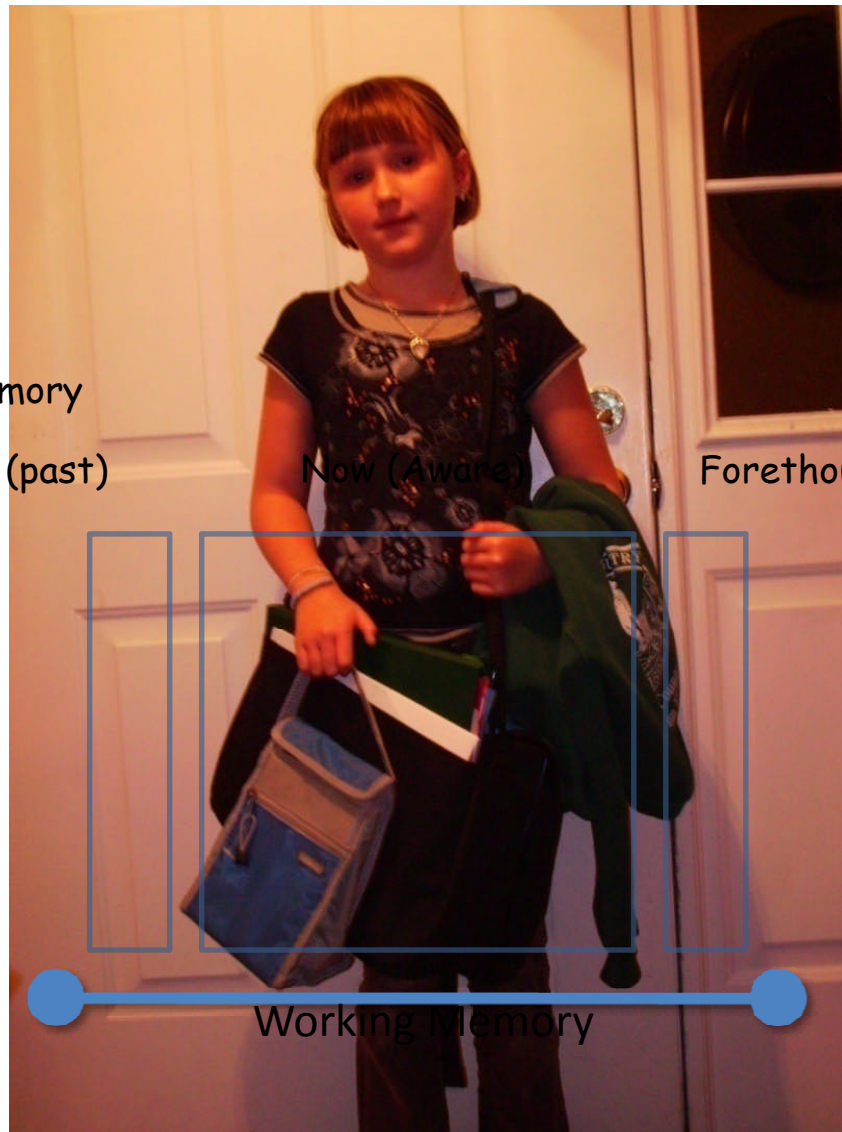


Episodic Memory

Note to Self (past)

Now (Aware)

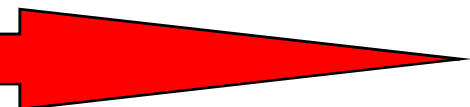
Forethought

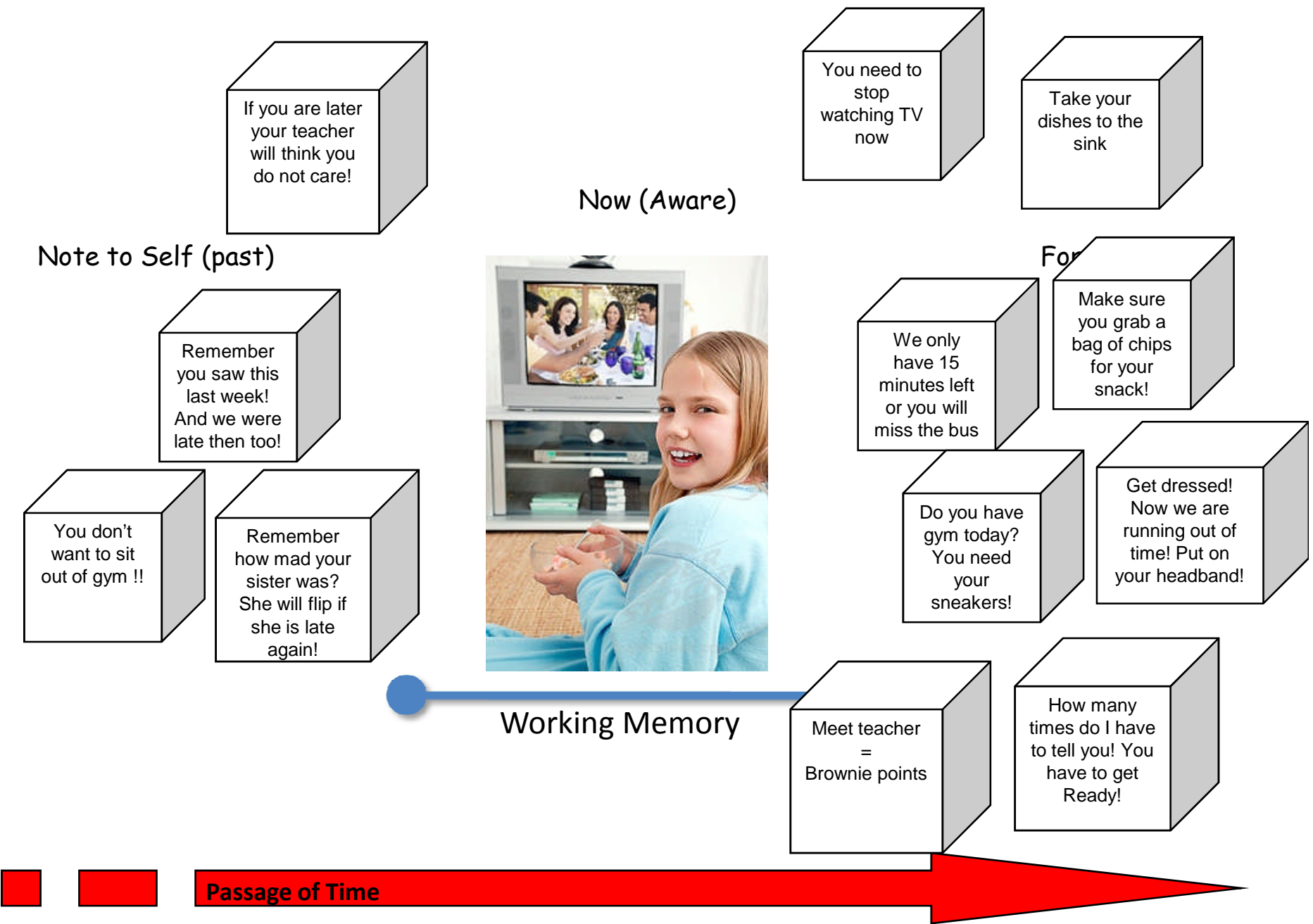


Working Memory



Passage of Time





Wall/Locker Art



Is your Bag packed?

- ☐ Shampoo
- ☐ Conditioner
- ☐ Brush
- ☐ Lotion
- ☐ Water Bottle
- ☐ Swimsuit
- ☐ Towel
- ☐ Cap
- ☐ Goggles
- ☐ Flippers



Is your Bag packed?



Writer's Workshop



Don't Get in Hot Water



Levels of Support

Hierarchy of Strategies for Teaching Forethought

Maximal Support → Picture

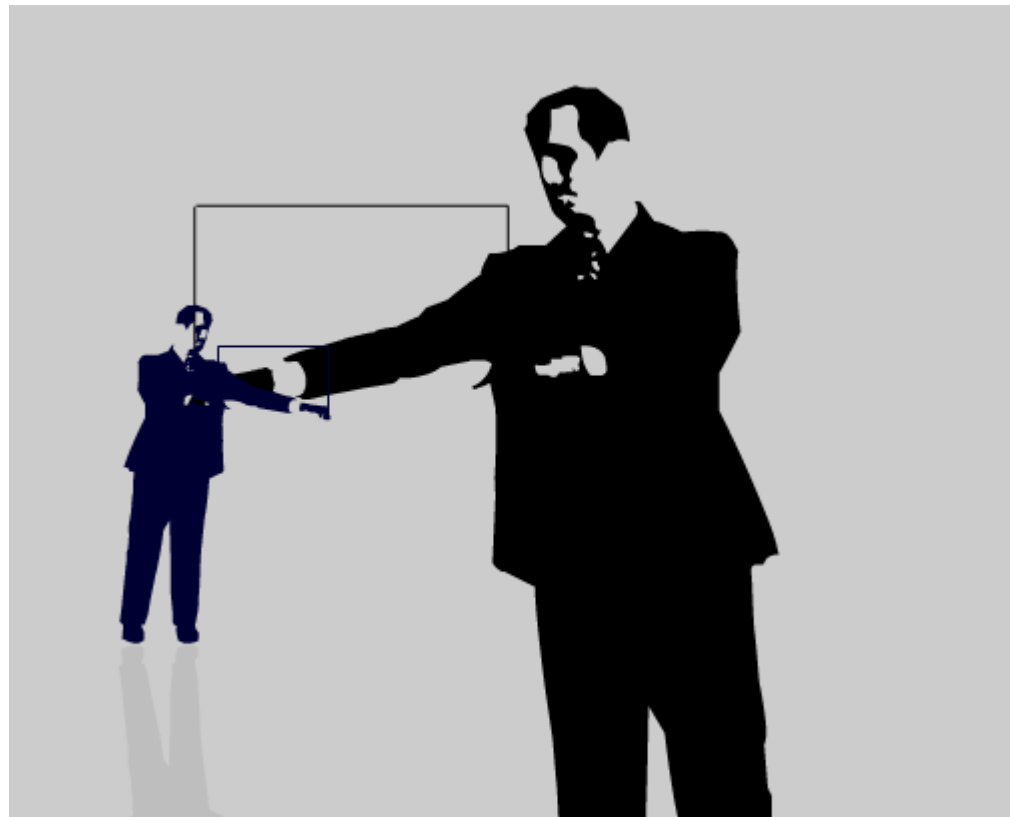
Moderate Support → Partial Picture

Minimal → Verbal Prompt: How will you look?

Little → Declarative Language: Hmmm



Block and
Box
to Block
and Identify
the Critical
Features



5 Minute Think

- Most thinking happens in the first 2 to 5 minutes. If you spend too much time you begin to over think the problem.
- Then it becomes difficult to make a decision and to act.
- We need to have our students initiate in those first two to five minutes to create and sustain motivation

Puppet

- **Part 1:** After choosing a fiction book and reading it, you will have the chance to bring the main character in the book to life by **designing a puppet.**
- Your puppet will be made from a wooden spoon or paint stick and should represent the main character in dress and appearance from the time period.



Soft Puppet



Finger Puppet



Hand Puppet



Popsicle Stick Puppet



Marionette



Materials:

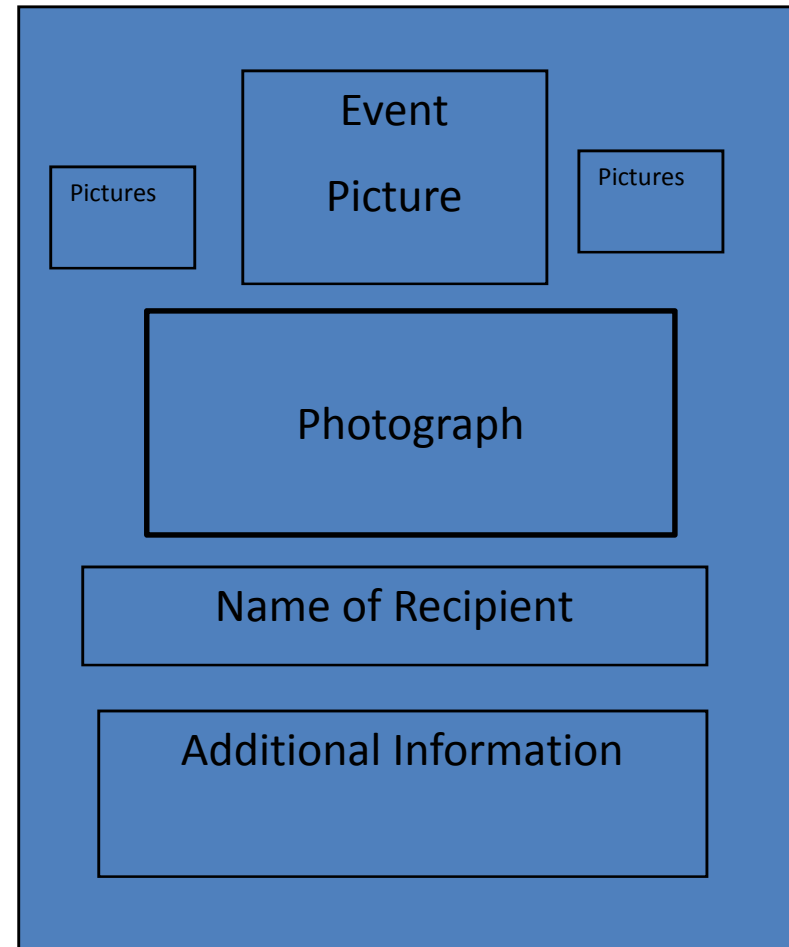
Accessories
(hat/jewelry /scarf)

Head: hair,
style, facial
hair,
makeup

Clothing
Shirt, outerwear,
Markings

Award

- Next, you will **create a special award** to honor the most noteworthy accomplishment of your chosen character.
- You can create a trophy, ribbon, certificate, or plaque to award your character.
- Your award must have a written paragraph describing the reason your character deserves the recognition.



Name of organization

Picture or Emblem

Name of Award

Who Given to

What the Award is For

A. Jose/Carson
C.F.A. Commissioner

Ancient Egypt Time Line Landmarks

- Research your assigned time line event (s). Find out several important facts including the date of the event (s). Record your notes in your journal. Record the resources you use to learn about your topic, name of the book or websites.
- On an index card carefully draw a colorful picture representing your topic. At the top of the card write the “topic” and date. Below the picture write two or three sentences explaining your topic. Your sentence should state who or what the card is about and describe what’s most important to know about this person, place or event.

What is the Future Picture of this Egypt Assignment?

What is the Future Picture of this Egypt Assignment?

Topic	Date
Picture	
Who	
What/ Importance	

Ancient Egypt Time Line Landmarks

- Research your assigned time line event (s). Find out several important facts including the date of the event (s). Record your notes in your journal. Record the resources you use to learn about your topic, name of the book or websites.
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5th grade Newspaper Assignment

- Students will create the front page of a newspaper. Each front page should include 2 articles about the book, and at least 2 of the following: weather reports, editorial or an editorial cartoon, ads, sports, and/or entertainment.



PRODUCT MARKETING MANAGER

Krause Corporation, an industry leader in domestic markets and an ever expanding presence in the international market place, has an immediate opening for a product marketing manager.

Duties will include: responsibility for marketing tillage and grain drill products, support product development, develop product strategies, lead projects and implement market research, develop literature and promotional material, manage pricing activities, and participate in marketing events, trade shows and media events.

Successful candidate should have a BS/BA in Engineering/Business/Marketing, MBA preferred, 8-10 years experience in marketing/sales/product management, knowledge of Agronomy and ability to apply principles to Krause product line. 20-30% travel, both domestically and internationally.

Excellent starting salary, plus a complete fringe benefit package including: group health, dental, employee/spouse/dependent life insurance, 401(k), profit sharing, and tuition reimbursement.

If qualified, submit your resume in strictest confidence to:

Krause Corporation

305 S. Monroe • Hutchinson, KS. 67501

twhite@krauseco.com

An EOE M/F employer

Information about the Business
Position

Responsibilities/Job Description

Experience

Salary/Benefits

Contact Information

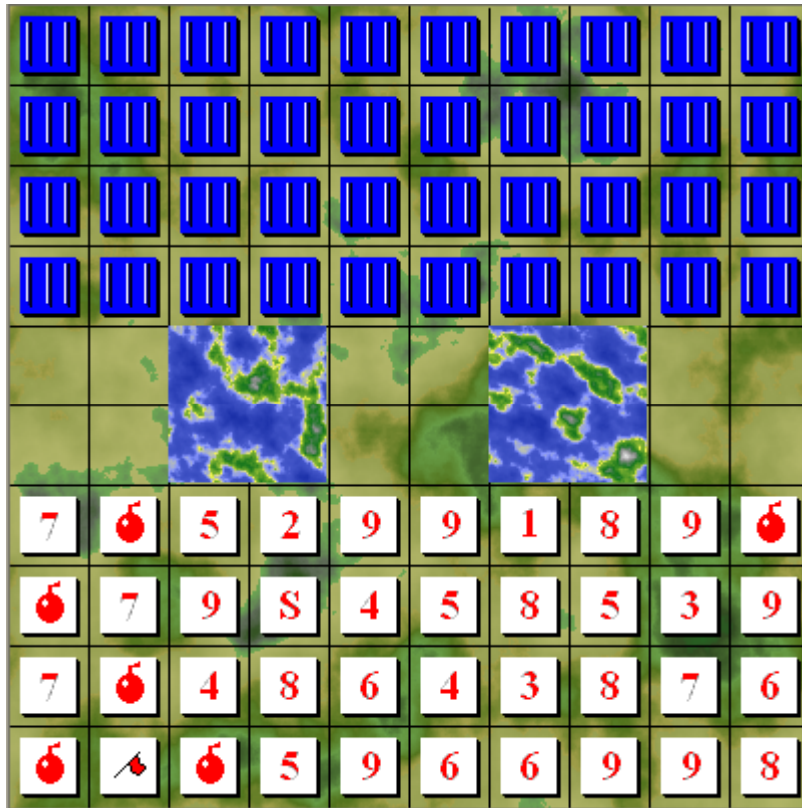
Ad

Business/Position
Job Description
Hours
Salary
Benefits/ Perks
Contact Information

High School Assignment

- For your term project you will create a game for the book Hamlet. You can create a board game or a card game. Your game must reflect a major theme in the book, show how the characters relate to this theme and the evidence from the book that supports your theme. You will be graded for content, creativity and attention to detail.

Create a Game



Game Assignment



Game Instructions

- We went online to major toy companies and game producers: Cranium, Hasbro, etc.
- We downloaded the pdf files of different game instructions and identified the key features for the directions on how to play the game.

of Players

Type of Game

Object

Setup

How to Play

Where to Start

How to Move

Important things to look out for

Special Hints

How to Win

Is there more than one way?

Rules that Must be Followed

Start and Stop: Beyond the Clock



Brain and Time



- The primary goal is to create a “visual” of the events so there is clarity for the events associated with the ticking of the internal clock.
- We therefore teach forethought for time so that students can see **How Time Fills Up and Is Used**

Timers

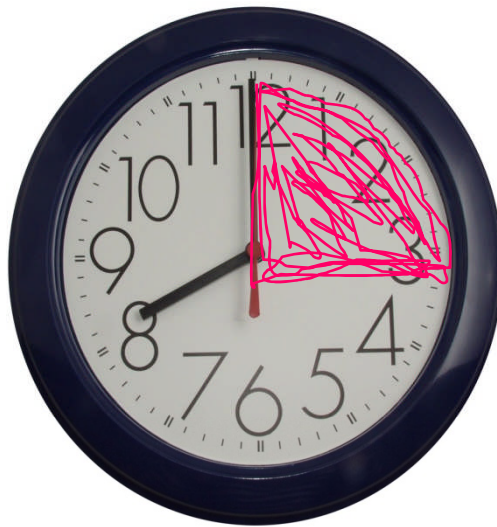


www.timetimer.com



These do not allow the student to see how time fills in 'real time' and or to reflect back and see how they used time.

Sense, See and Feel Time



Use Wipe OFF markers in kid section at Staples or Overhead or Washable Markers.

Dry erase will not work

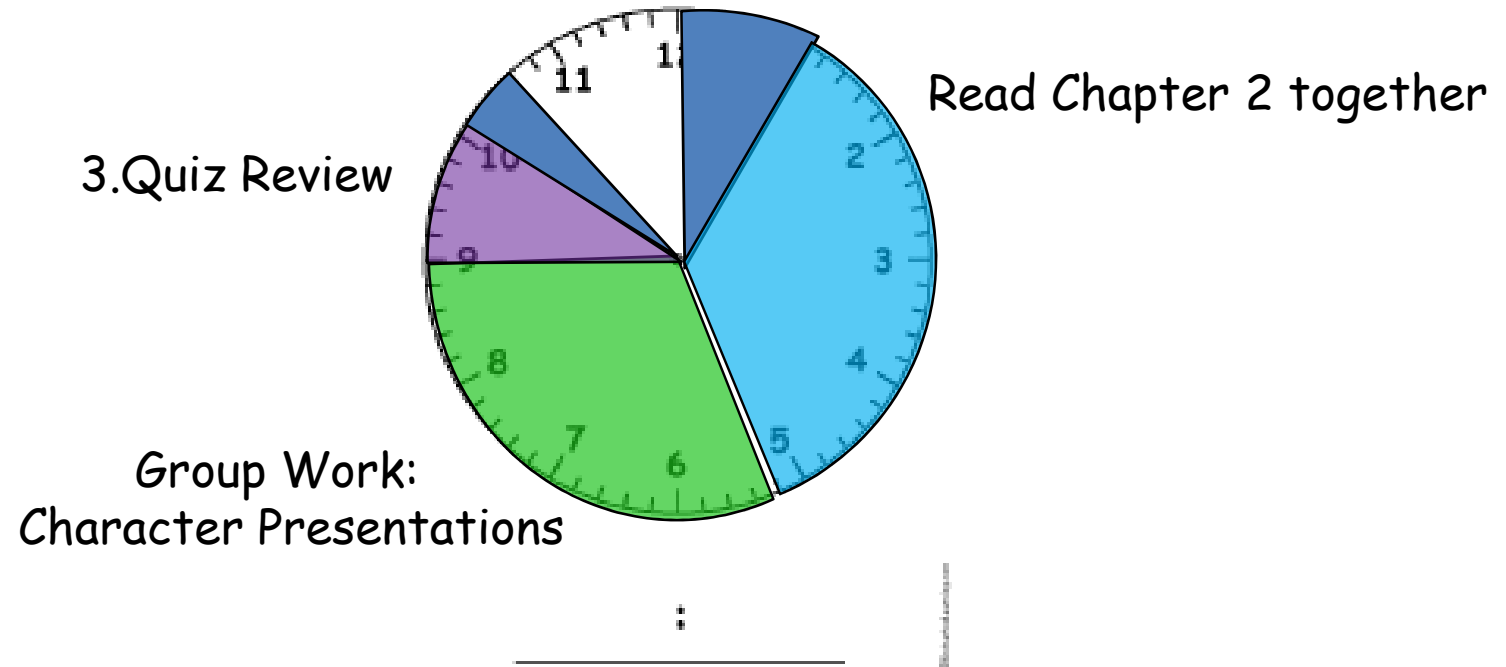
Time has Passed...Has the Pace Changed?

Coaching: Review How Time was Used and Identify Time Robbers

1. Read Chapter 2 together

2. Group Work: Character Presentations

3. Quiz Review



Language of Time

Estimate Forward
Monitor During
Reflect Back



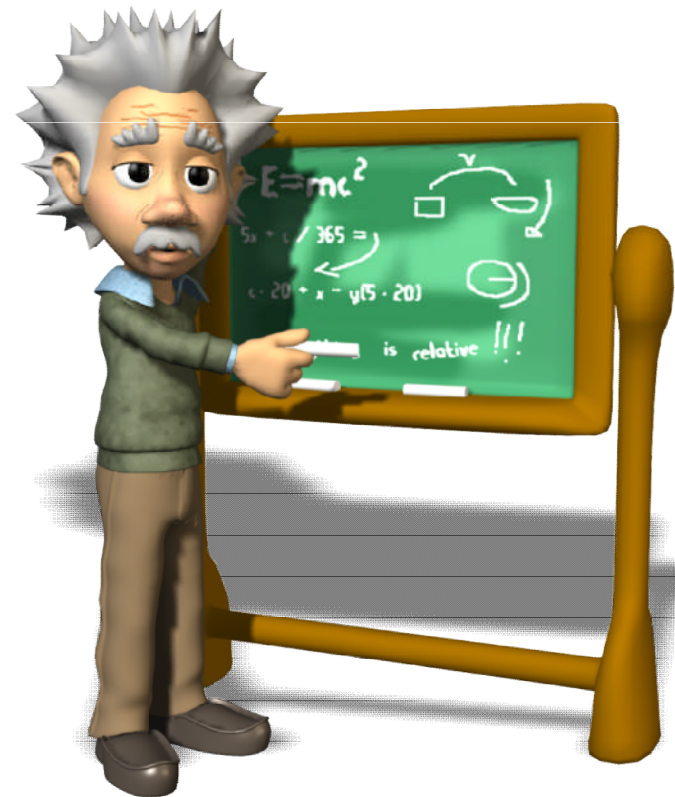
Time: What Works and What Does Not Work?




Encourage knowledge of individual energy boosters:

Exercise, music, food, hydration,
planning to work toward
something fun, etc.

Know your time Robbers:

- Technology
- External
- Psychological
- Internal



Period 1 7:50-8:42	Reading	Science	Science	Music	Science
Period 2 8:42 -9:34	History 	Math	Math	History	Math
Period 3 9:34-10:26	Gym	Reading	Health	Reading	Art
Period 4 10:26-10:58	Spelling	Spelling	Spelling	Spelling	Spelling
10:58-11:40	Lunch/ Recess	Lunch/ Recess	Lunch/ Recess	Lunch/ Recess	Lunch/ Recess
Period 5 11:40 –12:31	Science 	History	History	Science	History
Period 6 12:31-1:23	Math 	Art	Reading	Math	Reading

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Want More Information?



www.executivefunctiontherapy.com