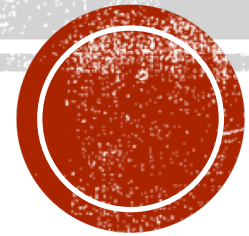# FUNCTION-BASED THINKING

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Goals & Objectives for this Session

- To understand student behavior ("good" and "bad") as part of a larger system.

- To understand the historical basis for "function-based thinking" (FBT).

- To be able to develop an operational definition of a struggling learner's challenging behavior.

- To be able to explain WHY behavior is not random.

- To understand what IS and what IS NOT a function of behavior.

- To begin to evaluate your current Tier I & II supports in light of FBT.

- To begin to think about how FBT can impact future Tier I & II planning.

FIRST ASSIGNMENT!

Think of an instance of challenging behavior (one you don't like) from one of the students in your building.

(Write it down!)

WHAT ARE WE TALKING ABOUT?

- Functional Behavior Assessment (FBA) is an assessment process designed to inform behavioral supports and interventions for Tier 3 students.

- Legal mandate (IDEA 1997, 2004)
  - FBA appears alongside "positive behavioral interventions and supports."

- Why?
  - As a proactive, preventative approach.
  - When we know *why* the behavior occurs, we can address it more successfully (Dunlap et al., 1996; Hansen et al, 2014).
  - Without an understanding of function, we risk reliance on punitive measures to control behavior (Carr et al., 1990).

REALITY CHECK

- IDEA says <u>when</u> to do FBAs. It doesn't say <u>who</u> should do them or <u>how</u>.

- FBA was included in IDEA of the basis of research done in Applied Behavior Analysis (ABA), much of it done in clinical (*not school*) settings.

- Schools are pressed for time and resources, and <u>*good*</u> FBAs can take a lot of both.

- IDEA applies to students with educational disabilities, and much of the problem behavior in schools comes from students without diagnoses or disabilities.

- Schools (overall) aren't awesome at doing FBAs well (Fox & Davis, 2005).

FUNCTION-BASED THINKING

(Hershfeldt, Rosenberg, & Bradshaw, 2010)

- A model for thinking about behavior.

- A systematic framework for:
  - Defining problem behaviors, and
  - Selecting interventions matched to the function of behavior.

- Designed for students who have challenging behavior, but who have not yet required multiple layers of intervention to support success.

FBA

- Lengthy and intensive process.

- Process resulting in a product.

- Requires formal assessment using multiple methods and comprehensive data.

- Requires extensive training.

- Typically conducted in response to more severe problem behavior.

- Usually requires multiple team members.

FBT

- Quick systematic way of thinking about behavior.

- A preliminary step – prior to FBA.

- Requires the teacher to understand the concept of function.

- Draws on research-basis for FBA.

- Early intervention strategy for mild to moderate behavior problems.

- Designed to be used prior to/during Student Assistance Team or outside supports.

FBT – EASY AS 1-2-3!

- Step 1: *Gathering information*

- Step 2: *Developing a plan*

- Step 3: *Measuring the success of the plan*

Step 1: Gathering Info

- Questions to answer:

  - *What is happening?*
    - Identify target behavior(s).
    - Develop an operational definition.

  - *WHY is it happening?*

WHAT IS HAPPENING?

- Selecting a <u>target behavior</u>…

    - What if there are MANY?

- Consider:
    - Frequency & intensity
    - Impact on learning

WHAT IS HAPPENING?

- Give the target behavior a short, descriptive label.

- Examples:
  - *"Verbal disruption"*
  - *"Property destruction"*
  - *"Arguing"*
  - *"Refusal"*
- Non-examples:
  - *"Being annoying"*
  - *"Rude behavior"*
  - *"Disrespect"*
  - *"Attention-seeking behaviors"*

WHAT IS HAPPENING?

- Next, we form an *operational definition* of our target behavior. It should be:
  - Observable – the behavior is an action that can be seen/heard.
  - Measurable – the behavior can be quantified
    - Counted yielding a frequency or rate
    - Timed yielding a duration
- It should pass the "Stranger Test"
- Examples and non-examples can help.

WHAT IS HAPPENING?

- A formula for our *operational definition:*

Label = Description + Examples + Non-examples.

This increases our chances of passing the "Stranger Test"

THE "STRANGER TEST"

- If a "stranger" were to read your operational definition and then observe the student, would you both agree on the occurrence of behavior?

YES

NO

EXAMPLE 1

- *Disruption*: Christian makes noises with his mouth, limbs, or materials during independent work time.
  - Examples: loudly shuffling materials not related to work; whistling; tapping his pencil on the desk.
  - Non-examples: Speaking after being called on; raising his hand to ask a question.

EXAMPLE 2

- *Physical Aggression*: Mia engages in behavior toward peers and adults that has the potential to cause physical harm.
  - Examples: hitting; kicking; biting; throwing objects in the direction of others
  - Non-examples: throwing objects away from others; screaming; high-fives; hugs

PRACTICE TIME

Write an operational definition for the student's behavior you listed earlier in the session.

- Is it observable?

- Is it measurable?

- Does it contain examples and non-examples?

- Does it pass the Stranger Test?

Rate your confidence in this skill.

WHY IS THIS IMPORTANT?

- If we can't define our concern, we can't measure it.

- If we can't measure our concern, we can't tell if it improves.

Remember steps 2 & 3 of FBT.

STEP 1: GATHERING INFO

- Questions to answer:

  - *What is happening?*
    - Identify target behavior(s).
    - Develop an operational definition.

  - *WHY is it happening?*

WHY IS IT HAPPENING?

- Why should we care why the behavior is happening?

- If we don't understand why the behavior is happening…
  - We focus on the wrong things
  - We miss opportunities to help build important skills
  - We can see the student as our adversary

WHY IS THIS CHILD SCREAMING?

WHY IS IT HAPPENING?

▪Why is it happening?
  ▪NOT because of a diagnosis.
  ▪NOT because (s)he is a jerk.

▪The target behavior is occurring because it serves a purpose.

THE "F" WORD

- *FUNCTION* –
  Implies a relationship or association between two variables.
    - A behavior that is related to the occurrence of an environmental variable.
    - An environmental variable that is related to the occurrence of a behavior.

THE "F" WORD

- *FUNCTION –*
  - In ABA, we often use the term to describe the relationship between a behavior and the environmental variable(s) that follow it.

  - Example: *"The function of her crying is attention."*

BEHAVIORISM 101

- *Selectionism.*
  - Just as Darwin's theory of *natural selection* helped to explain the evolutionary history of a species, the idea of "selection by consequence" (or *selectionism)* helps explain how our behaviors are learned.

- As new behaviors are learned, some "work" and survive (*reinforcement*) while others fail to work and do not survive (*punishment*).

FUNCTIONS OF BEHAVIOR

Positive Reinforcement (Gain)	Attention	Sensory Stimulation
	Item/Tangible	

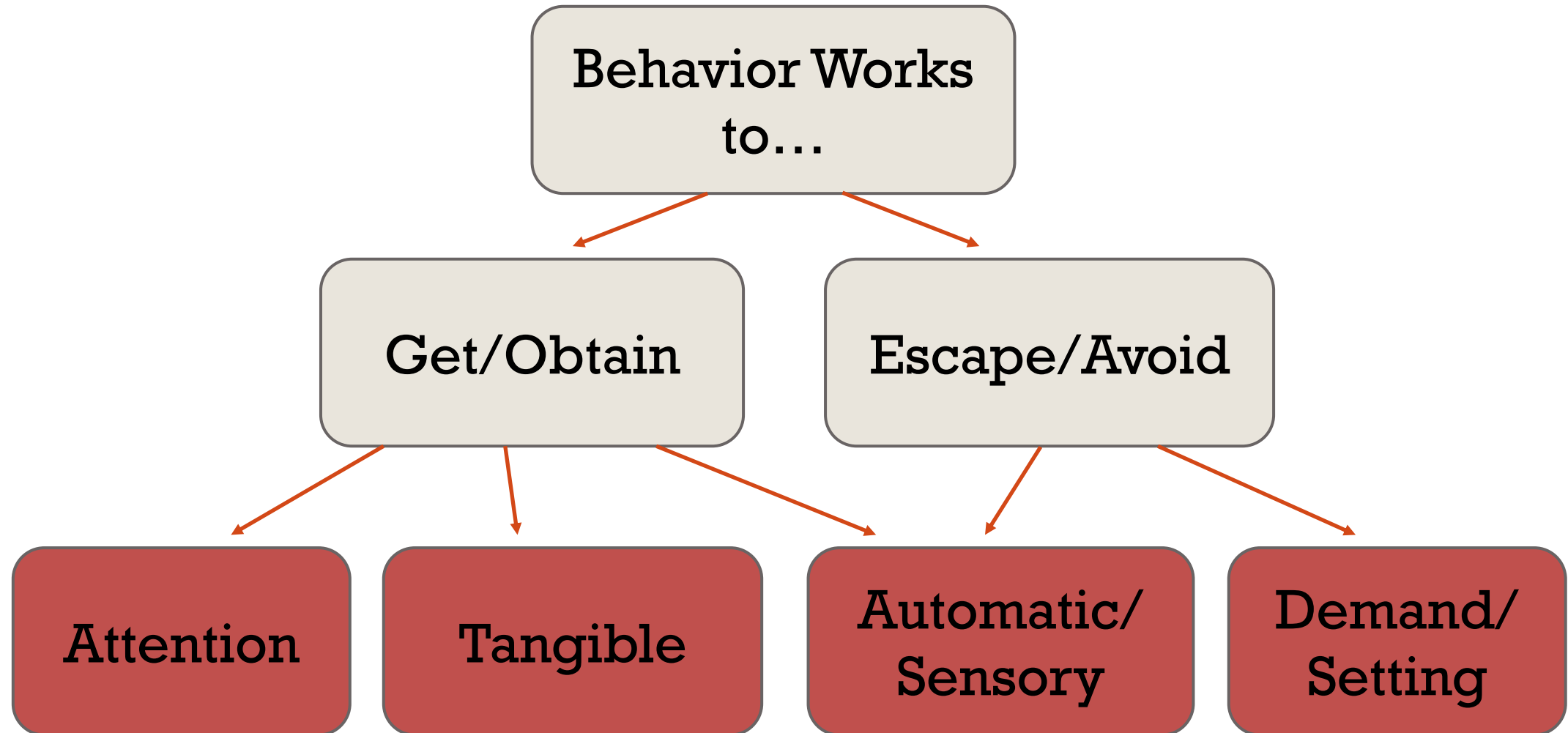| Negative Reinforcement (Escape)	Attention	Sensory Stimulation
	Activity/Expectation	

FOR OUR PURPOSES…

MORE ABOUT FUNCTION

- When the Function is ***Attention***

  - The target behavior is reinforced and maintained by access to attention.
    - Could be the attention of <u>one</u> specific person (teacher or peer), or of many (adults, peers, etc.).
    - Not always "warm & fuzzy" attention. (*Disapproving* attention may be more preferred than NO attention.)

MORE ABOUT FUNCTION

- When the function is ***Tangible***

  - The target behavior is reinforced and maintained by access to preferred ***stuff***.
    - Could be preferred items (e.g., toys, technology), food (e.g., snacks, lunch), activities (e.g., games, recess), or places (e.g., specific desk or area, sensory room).

MORE ABOUT FUNCTION

- When the function is *Escape/Avoidance*

  - The target behavior is reinforced and maintained by escape or avoidance of…
    - Academic or non-academic tasks
    - Settings
    - People

MORE ABOUT FUNCTION

- *Automatic/Sensory*

  - The target behavior may be maintained by internal (sensory) reinforcement.
    - *Positive* – the behavior reinforces itself ("It feels good")
    - *Negative* – the behavior counteracts or reduces an unpleasant or aversive sensation.

MORE ABOUT FUNCTION

- What about ***Control?***

- NOT a function (Iovanonne, Anderson, & Scott, 2013)!
- Dig deeper – <u>what</u> is the student trying to control?
  - When you attend to them?
  - What work they do or demands they follow?
  - What they can access?
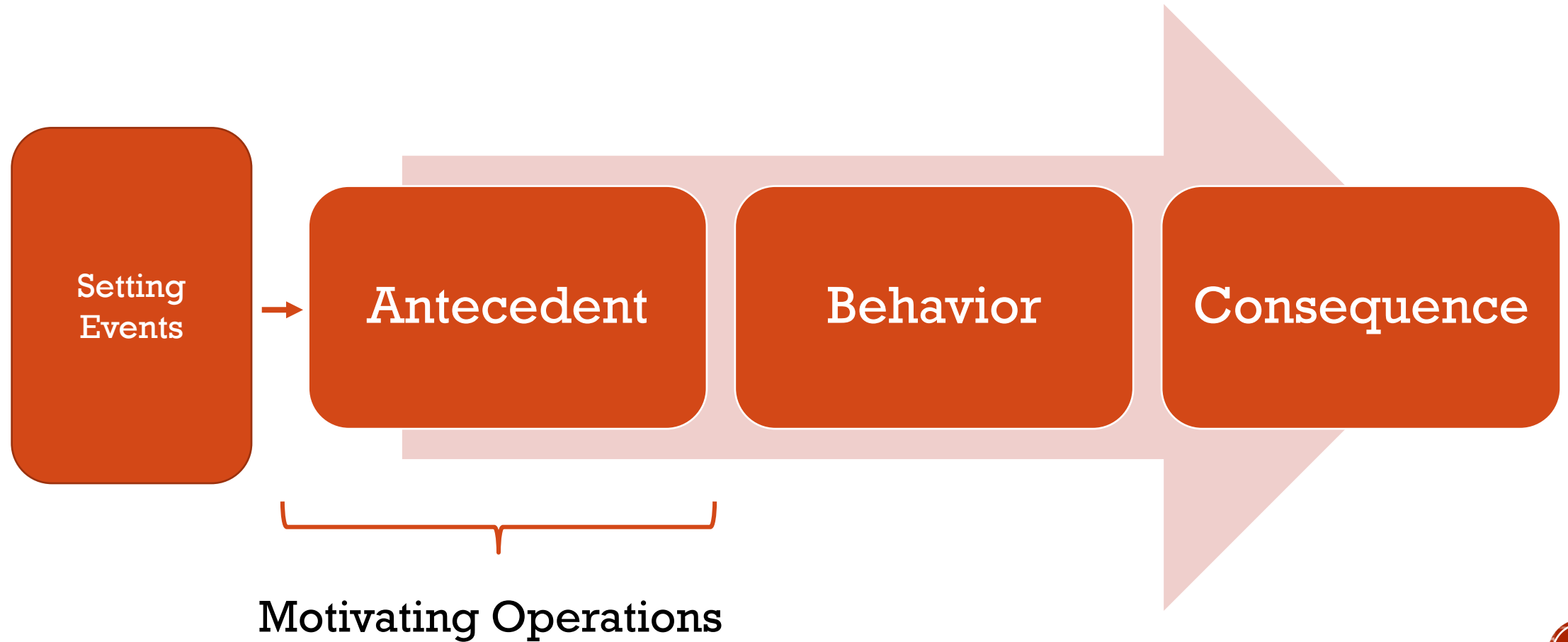- Possibly multiple functions.
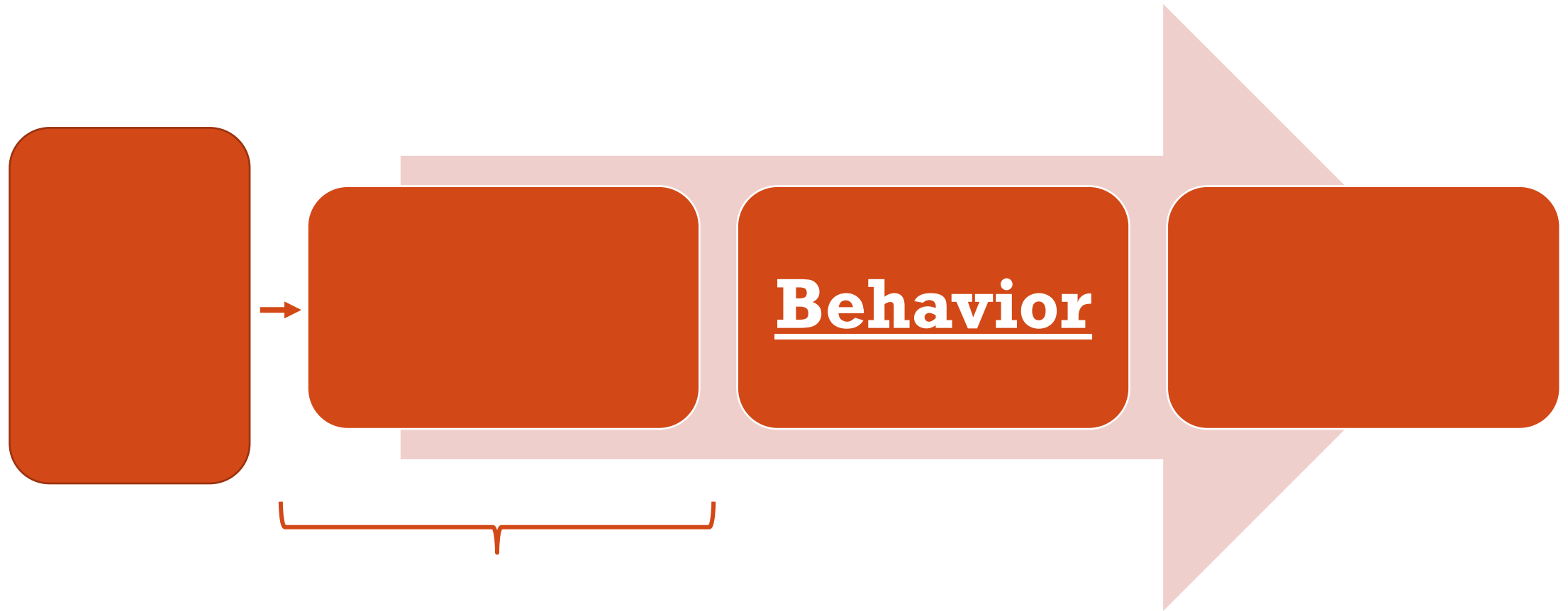
WHY IS IT HAPPENING?

Wouldn't it be nice if there was some framework for understanding how behavior interacts with the environment?

FBT – EASY AS A-B-C!

| Setting Events | Antecedent | Behavior | Consequence |

Motivating Operations
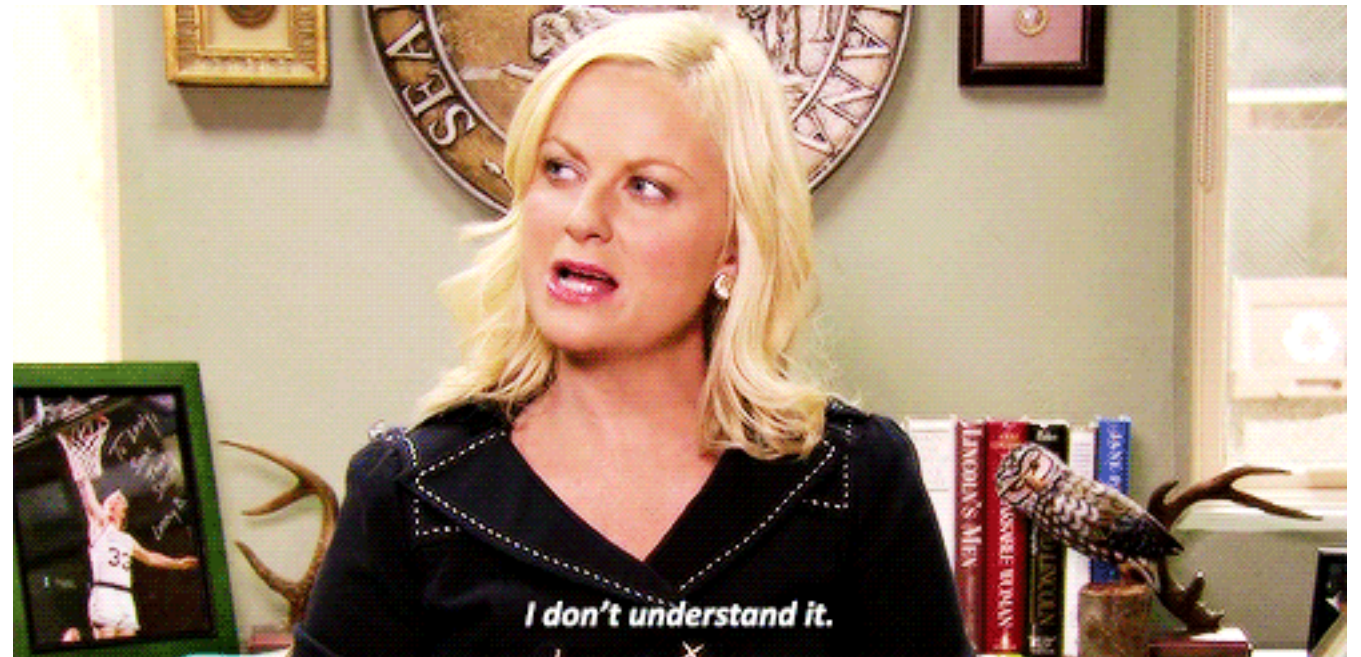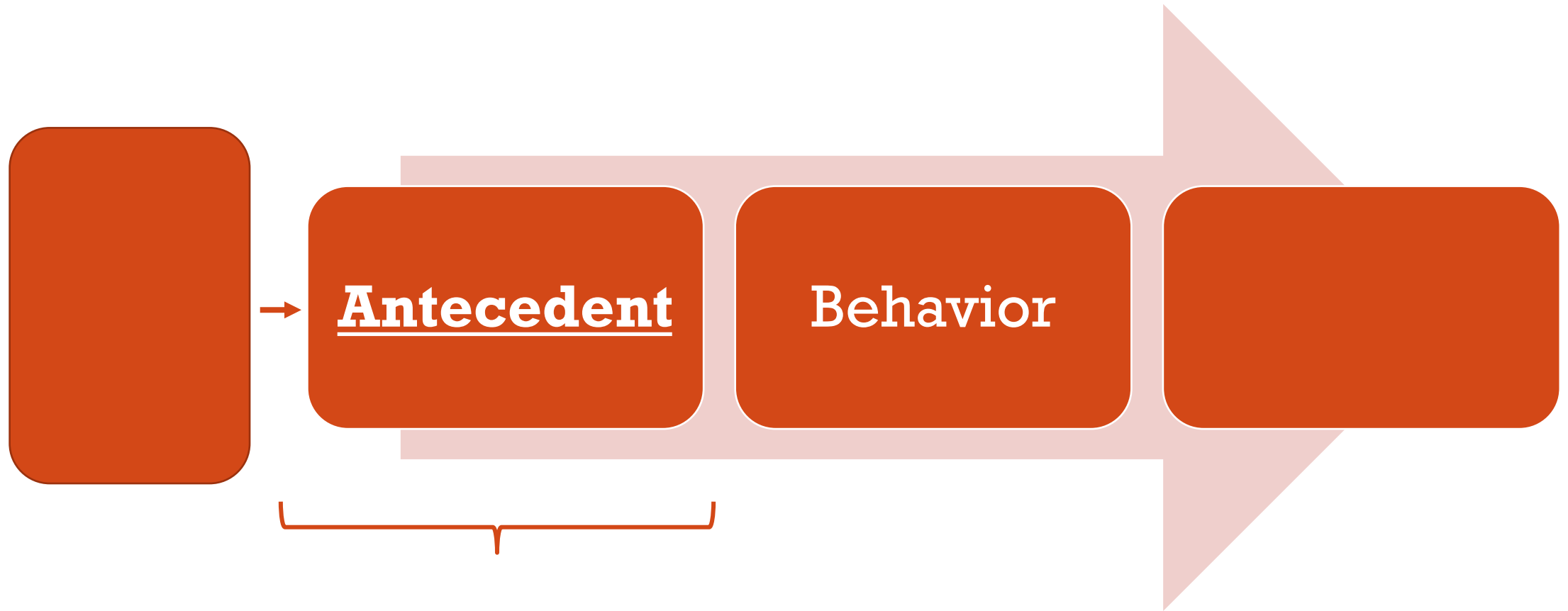
"B" IS FOR BEHAVIOR

Behavior

"B" IS FOR BEHAVIOR

- When asking WHY the behavior is occurring, we start with the behavior.
- This is the **target behavior** we identified and operationally defined earlier.

- We notice
  - WHEN
  - WHERE
  - WITH WHOM

"A" IS FOR ANTECEDENT

Antecedent   Behavior

"A" IS FOR ANTECEDENT

- *Antecedent* means "before"

- We notice what cues, situations, or events happen before the behavior.
  - Often, immediately before.
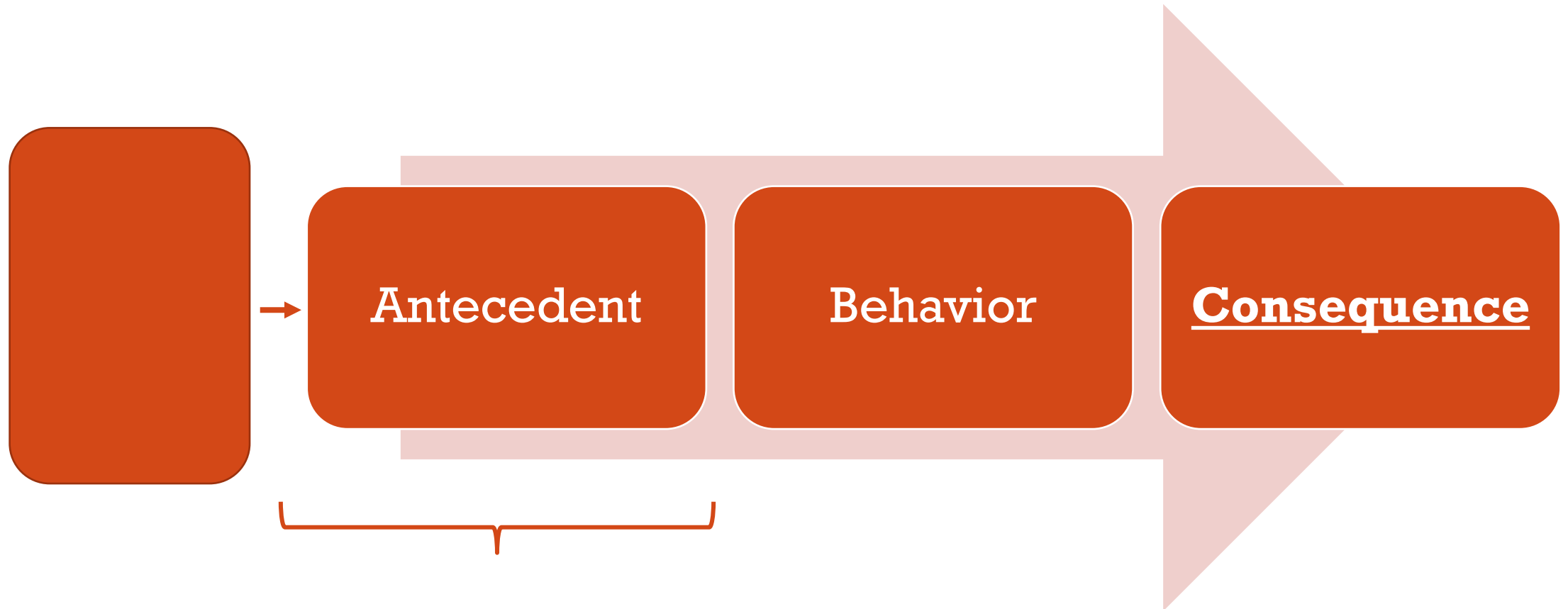- Sometimes referred to as a "trigger" for behavior.

"A" IS FOR ANTECEDENT

- Examples:
  - Transitions (reading to math, recess to class, class to class)
  - Peer interactions
  - Bell rings

- The antecedent "signals" that reinforcement is available.

"C" IS FOR CONSEQUENCE

Antecedent

Behavior

<u>Consequence</u>

"C" IS FOR CONSEQUENCE

- *Consequence* is what follows the behavior.

- We notice what follows the behavior, keeping in mind the functions of behavior.

- What does the student **get** or **avoid** as a result of the behavior?
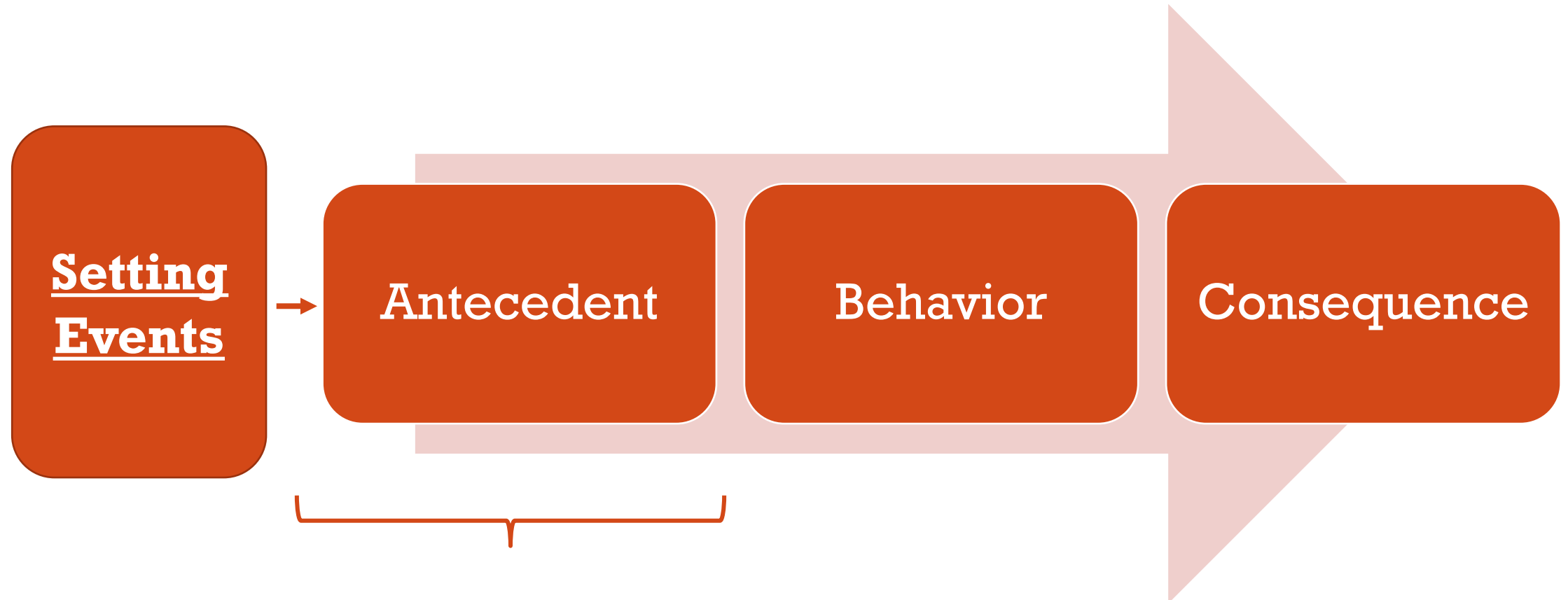
"C" IS FOR CONSEQUENCE

- Examples:
  - The teacher attends to the behavior.
  - The student gets the iPad before his turn.
  - The class laughs at the behavior.
  - The student is removed from the class.
  - The student is ignored.

FBT – EASY AS A-B-C!

Setting Events → Antecedent | Behavior | Consequence

SETTING EVENTS

- Setting events are "long-term" antecedents.
- They are conditions, events, or sensations that affect the probability of behavior.
- They affect behavior by affecting the value of a reinforcer.
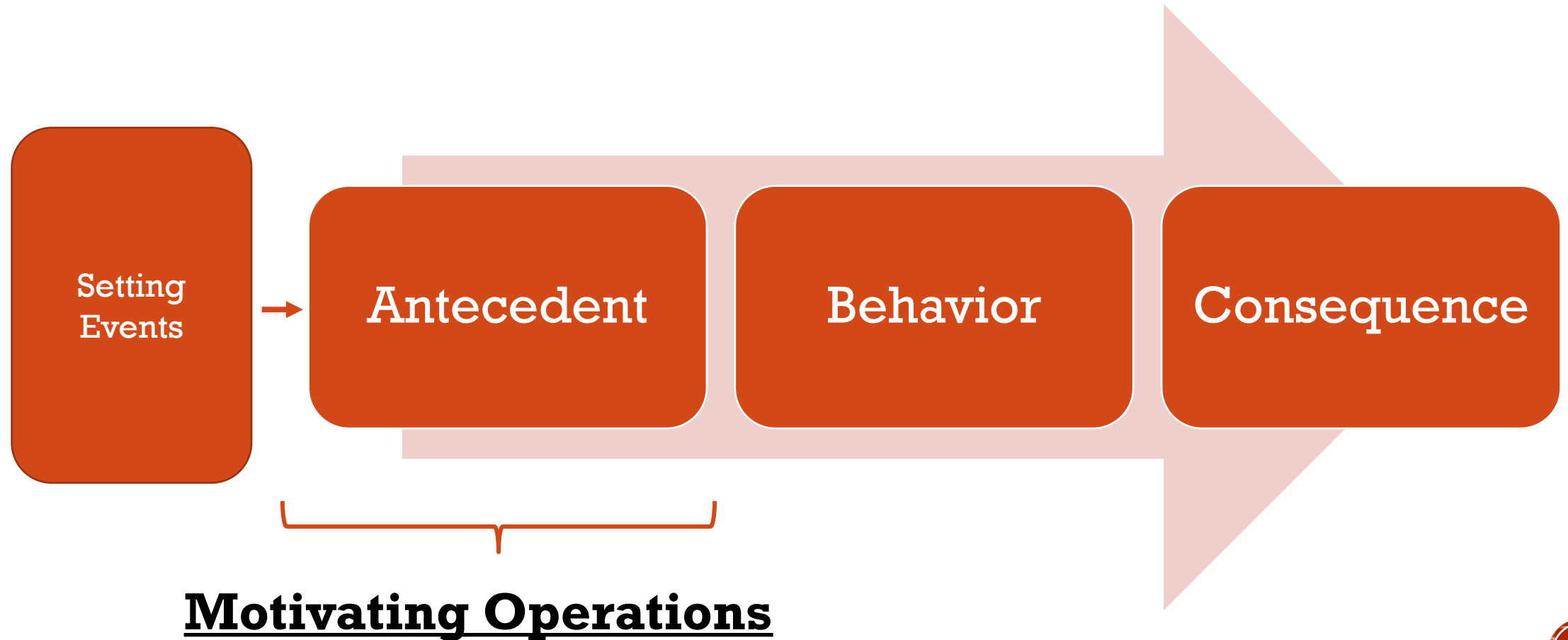
SETTING EVENTS

- Could include:

  - *Physical/biological* – illness, sleep deprivation, medication side effects, cognitive deficits, hormonal changes, etc.
  - *Environmental* – room temperature, lighting, etc.
  - *Social* – family member illness or death, peer conflict, etc.

FBT — EASY AS A-B-C!

| Setting Events | Antecedent | Behavior | Consequence |

Motivating Operations

MOTIVATING OPERATIONS

- Similar to Setting Events, Motivating Operations affect behavior by affecting the value of the reinforcer.
  - Related to *satiation* and *deprivation.*

- *Establishing operations* – the reinforcer is more valuable because of deprivation.
  - Example: The student has been working hard for 45 minutes.

- *Abolishing operations* – the reinforcer is less valuable because of satiation.
  - Example: The student has just returned from lunch.

PUTTING IT TOGETHER

- Once we have an understanding of how behavior and environmental variables fit together…

- We use it to develop a "Summary Statement" or "Hypothesis Statement" about a student's behavior.

PUTTING IT TOGETHER

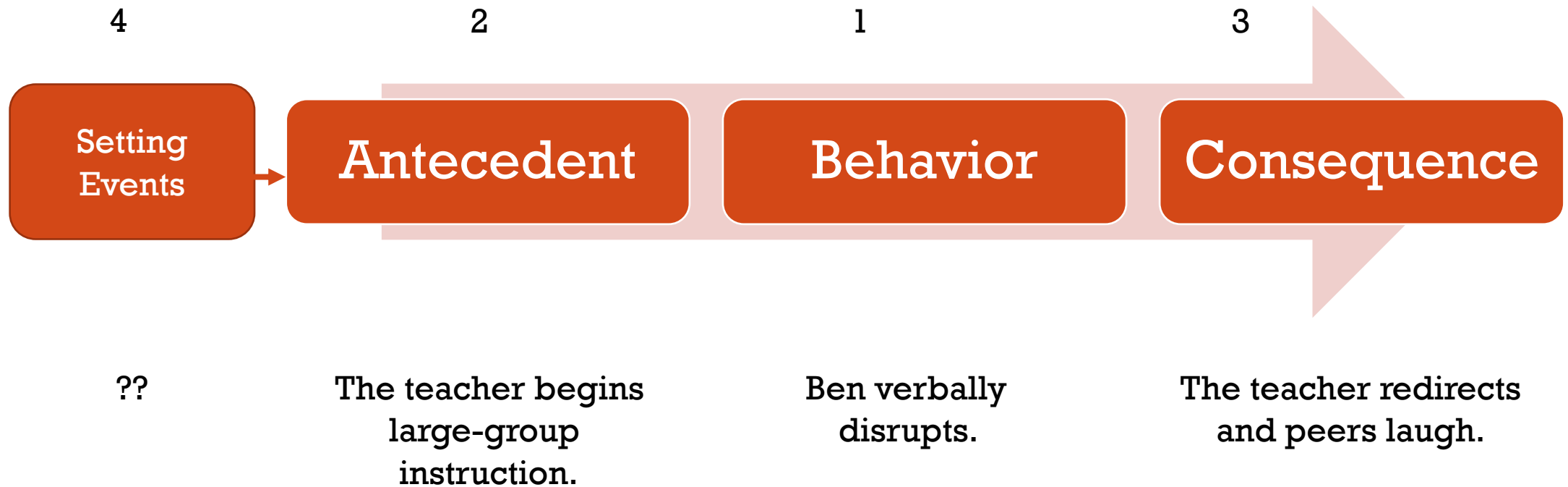| 4	2	1	3
Setting Events	Antecedent	Behavior	Consequence
Javon is tired.	Peers approach Javon.	Javon screams and cries.	Peers move away and leave him alone.
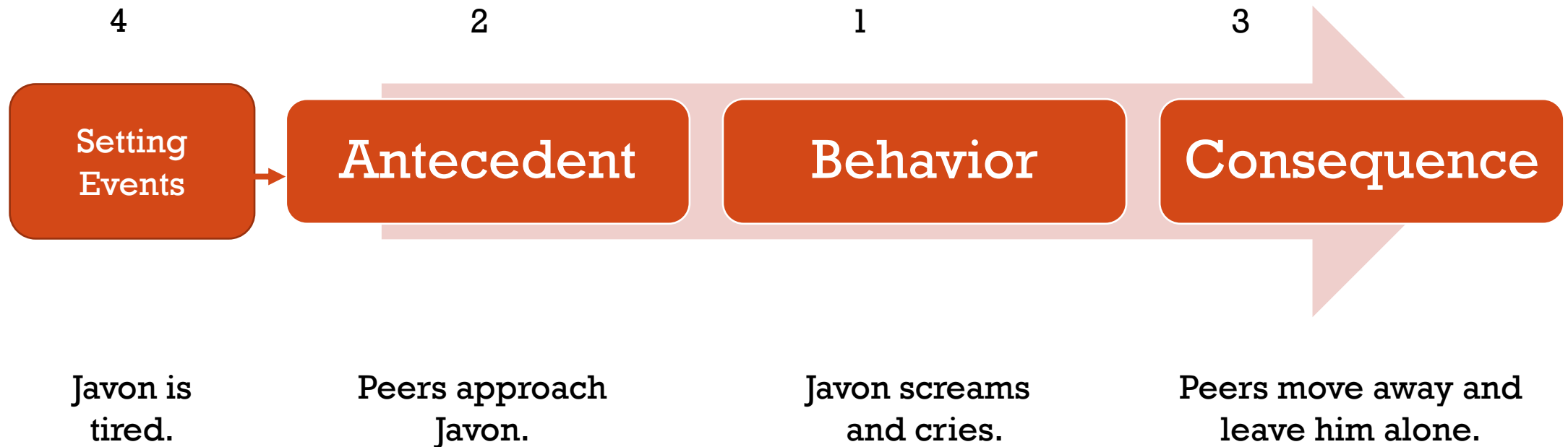
SUMMARY STATEMENT

- Javon screams and cries when he is approached by peers during center time. When he screams, peers move away and leave him alone. This is more likely when Javon has not slept well the previous night.

ANOTHER ONE!

4   2   1   3

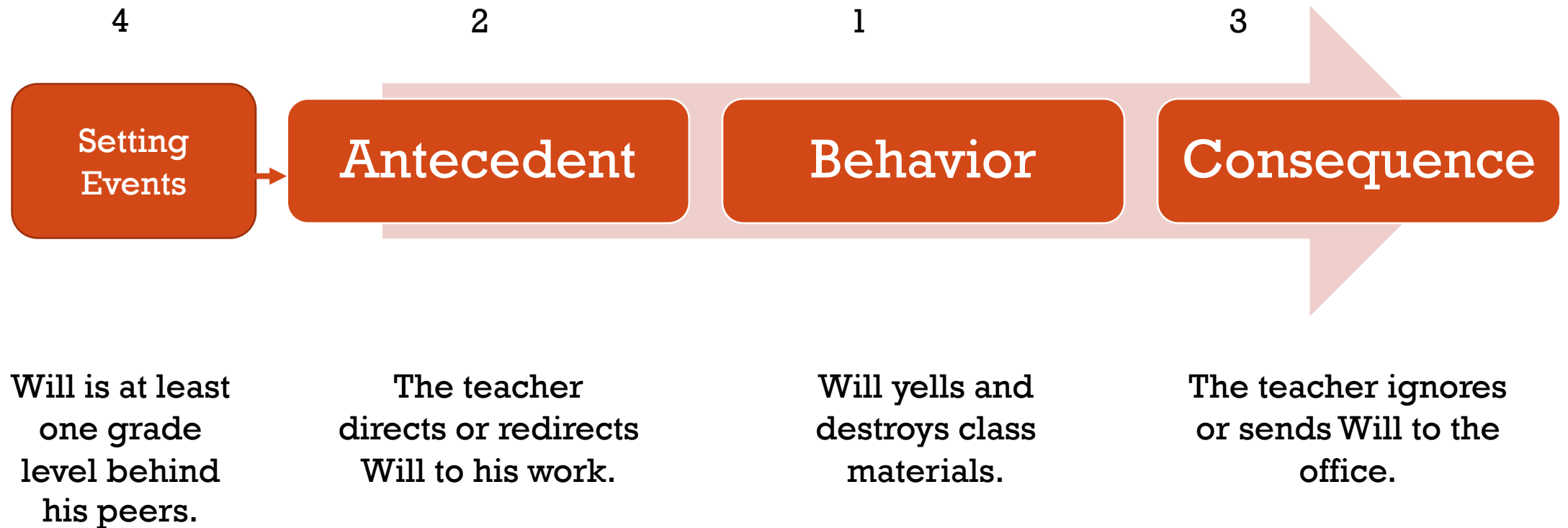| Setting Events	Antecedent	Behavior	Consequence
??	The teacher begins large-group instruction.	Ben verbally disrupts.	The teacher redirects and peers laugh.

SUMMARY STATEMENT

- When the teacher begins whole-group instruction, Ben frequently blurts out and disrupts. When he does so, his teacher redirects him and his peers laugh.

ONE MORE TIME!

4	2	1	3
Setting Events	**Antecedent**	**Behavior**	**Consequence**
Will is at least one grade level behind his peers.	The teacher directs or redirects Will to his work.	Will yells and destroys class materials.	The teacher ignores or sends Will to the office.

SUMMARY STATEMENT

- When the teacher directs Will to begin his assignment, he often will yell and/or destroy his work materials. When this happens, the teacher will either ignore it or, at times, send Will to the office. This is more likely when the assignment is more challenging for Will.

PRACTICE TIME!

- Thinking of the challenging student behavior you operationally defined earlier…

  Write a Summary Statement.

  - Think about common antecedents.
  - Think about common consequences.
  - Think about possible setting events.

- What is the hypothesized function of the behavior?

NEXT STEPS…

- Step 2 of FBT = *Developing a Plan.*

- Function should inform this!

- How?…

DEVELOPING A PLAN

- We use our understanding of function to inform our intervention.
  - By remembering that behaviors are not <u>random</u>; they exist and continue because they <u>work</u>.
  - The "pay out" of the intervention should (ideally) match the "pay out" of the target behavior.
  - We want to leverage our understanding of function because it tells us what motivates the students.

EXAMPLE

- When the teacher begins whole-group instruction, Ben frequently blurts out and disrupts. When he does so, his teacher redirects him and his peers laugh.

- Assuming the function is "attention,"…

- Would scolding Ben be an effective response?

- What about CICO?

- What about teaching classmates to ignore Ben's disruption?

ANOTHER EXAMPLE

- When the teacher directs Will to begin his assignment, he often will yell and/or destroy his work materials. When this happens, the teacher will either ignore it or, at times, send Will to the office. This is more likely when the assignment is more challenging for Will.

- Assuming the function is "escape/avoidance,"…

- Would ignoring the behavior be an effective response?

- What about sending Will to the principal's office?

- What about CICO?

ASKING THE HARD QUESTIONS (OF OURSELVES)

Setting Events	Antecedent	Behavior	Consequence

Motivating Operations
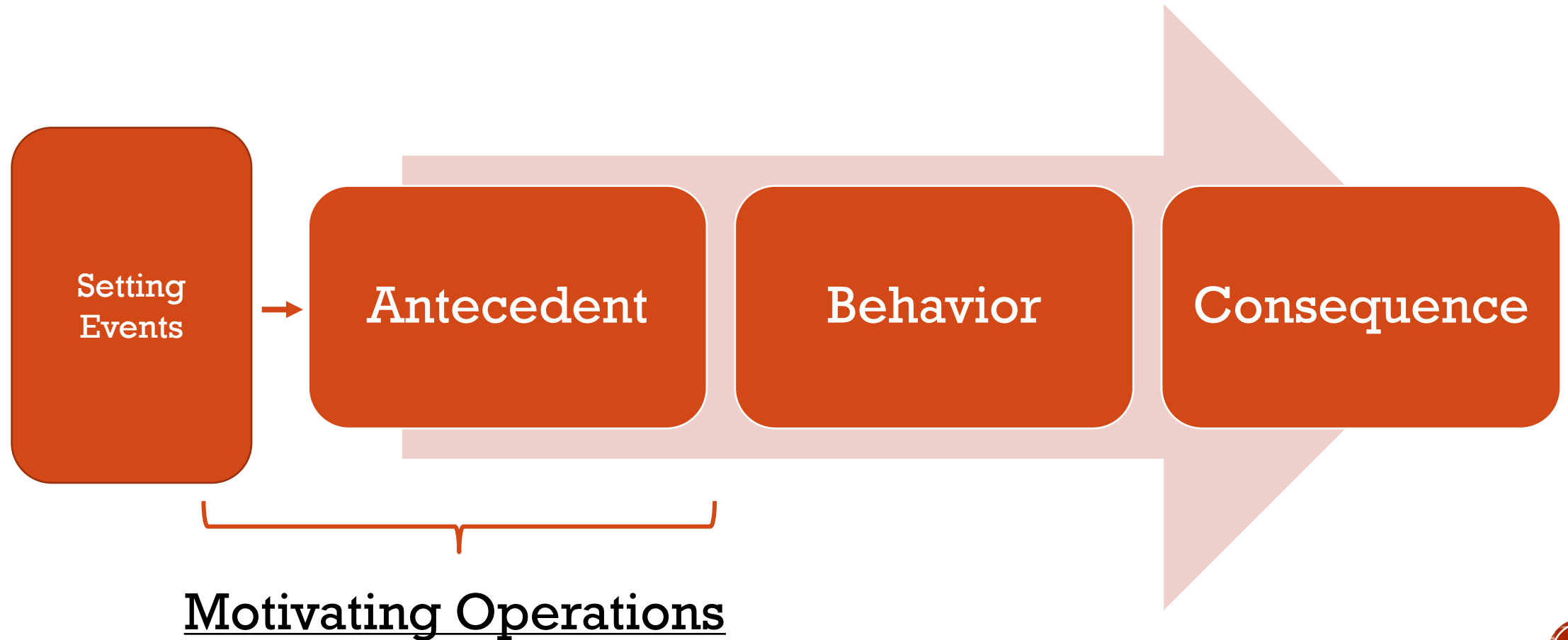
NOW WHAT??

- Next steps…
  1. Determine how FBT can fit with MTSS/PBIS.
  2. Develop Tier II supports that can target multiple functions.
  3. Determine a process for evaluating success.

Appropriate Tier II Supports

- An understanding of function should inform our Tier II supports.
  - *CICO* (matched to attention and tangible)
  - *Check & Connect* (matched to attention and tangible)
  - *Class Pass* (matched to escape and tangible)
  - *Breaks Are Better* (matched to attention, tangible, and escape)

- We may also need to innovate.

EVALUATING SUCCESS

- Remember Step 3 of FBT (Measuring success).
- This shouldn't be an afterthought.
  - A process for data collection should be built into each plan.
  - A goal should accompany each plan.
  - Remember baseline data.

References

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