

## S-C Brain Science-2: Understanding Executive Functions

**OUTLINE** 

5 min

4

min

10

Objectives: Students will be able to:

- 1) Describe executive functions (e.g., planning, organization).
- 2) Identify and label the frontal lobe and prefrontal cortex.
- 3) Practice using executive functions strategically.
- 4) Apply executive function steps to school and life.

MATERIALS NEEDED: Handout 1.4.2



Video – S-C Brain Science, Pt 2: Understanding Executive Functions
[PLAY video introducing "Exe" for executive functions headquartered in the
"Rational Control Center." Exe is like the CEO or head coach of Ze's brain. He helps
him with decision-making, motivation, organization, and goal setting. Ze learns that
he can choose to ignore him or listen to him. If he listens, Exe tends to give good
guidance. Without Exe, Ze might make some choices he regrets later.]

Meet EXE (for EXEcutive Functions) & Brain Anatomy Question [After watching the video, CLICK to next slides and ask students:]

- What are some things Exe (executive functions) could help Ze with?
   [Possible answers: planning & organization, goal setting & achieving, purposeful decision-making, self-motivation, cooling strong emotions, time management.]
- Executive functions are managed in: [Answer: e. = c. the prefrontal cortex within a. the frontal lobe.]

## Thinking It Through & Think-Pair-Share [also on Handout 1.4.2]

[Remind students of Exe's Bottom Line questions, and then ask them to use the questions to think through different dilemmas and options:]

Your friend seems like he may be mad at you. (See slide for possibilities.)

[Have students think through questions for the dilemmas below, then partner with a classmate (pair), and then discuss as a class (share):]

- You have a test on Friday and you're not ready.
- You're thinking about applying for a job.

[After talking through the dilemmas and options, **CLICK** to ask:]

- How could a decision-making process like this be helpful?
- How is this similar to or different from how you usually make decisions?

## Wrap Up

 What are examples of how you use your executive functions in school and life? [keeping an agenda/planner, being on time, being a good friend] 1 min