

# WAYS TO HELP OUR (GRAND)CHILDREN LEARN

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**SCHOOL OF EDUCATION**  
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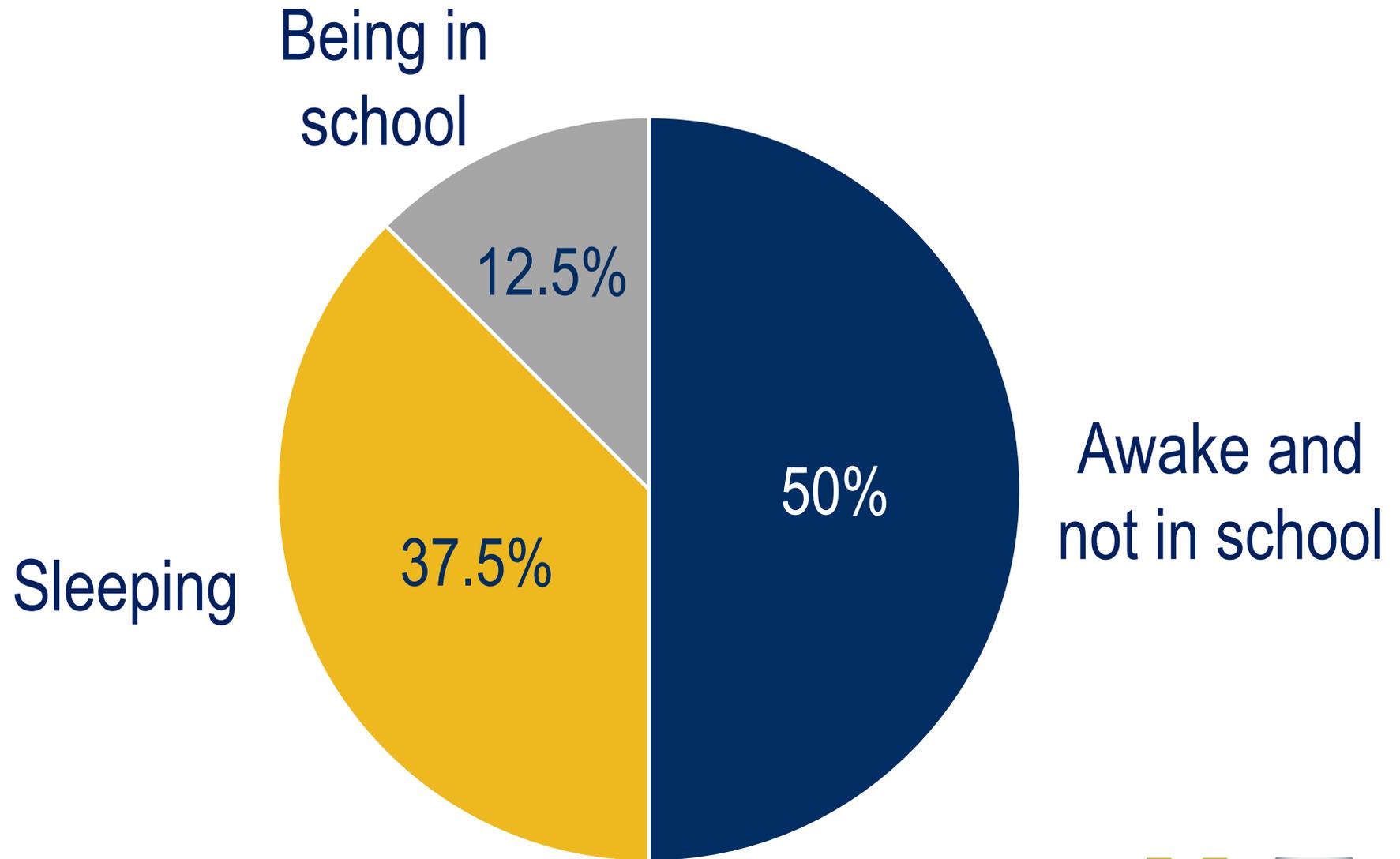
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# YOUNG PEOPLE'S TIME



# (HOW) CAN FAMILIES HELP CHILDREN LEARN?

- Support their in-school success
- Provide supplementary learning (lessons, tutoring, camps, etc.)
- Extend their knowledge and reasoning skills in out-of-school contexts
- Provide opportunities to learn things from you that school does not and cannot teach
- Develop their sense of agency and self-confidence

# SUPPORT IN-SCHOOL SUCCESS

- Provide regular time to do homework, and protected space and materials to do it
- Ask them to explain specific new skills or ideas to you (when you can do this with a serious and authentic tone)
- Help them **persevere** when they are stuck

# WHAT IS “PERSEVERANCE”?

Grit?

Growth  
mindset?

# HELP TO DEVELOP PRODUCTIVE PERSEVERANCE

When children are stuck and say they do not know how do to something, instead of trying to show them:

1. Ask questions:
  - What the assignment or problem says, or is asking
  - Is it like anything they have done before?
2. “Model” how *you* would try to puzzle about or approach it
3. Show them ways to explain what is making them feel stuck
4. Remember that perseverance is a context-specific set of skills, not a trait

# TURN AND TALK

What is something *you* have persevered with in your life, in or out of school?

Place a ring around three of the numbers below so that they sum to 22.

How many different ways can you do this?

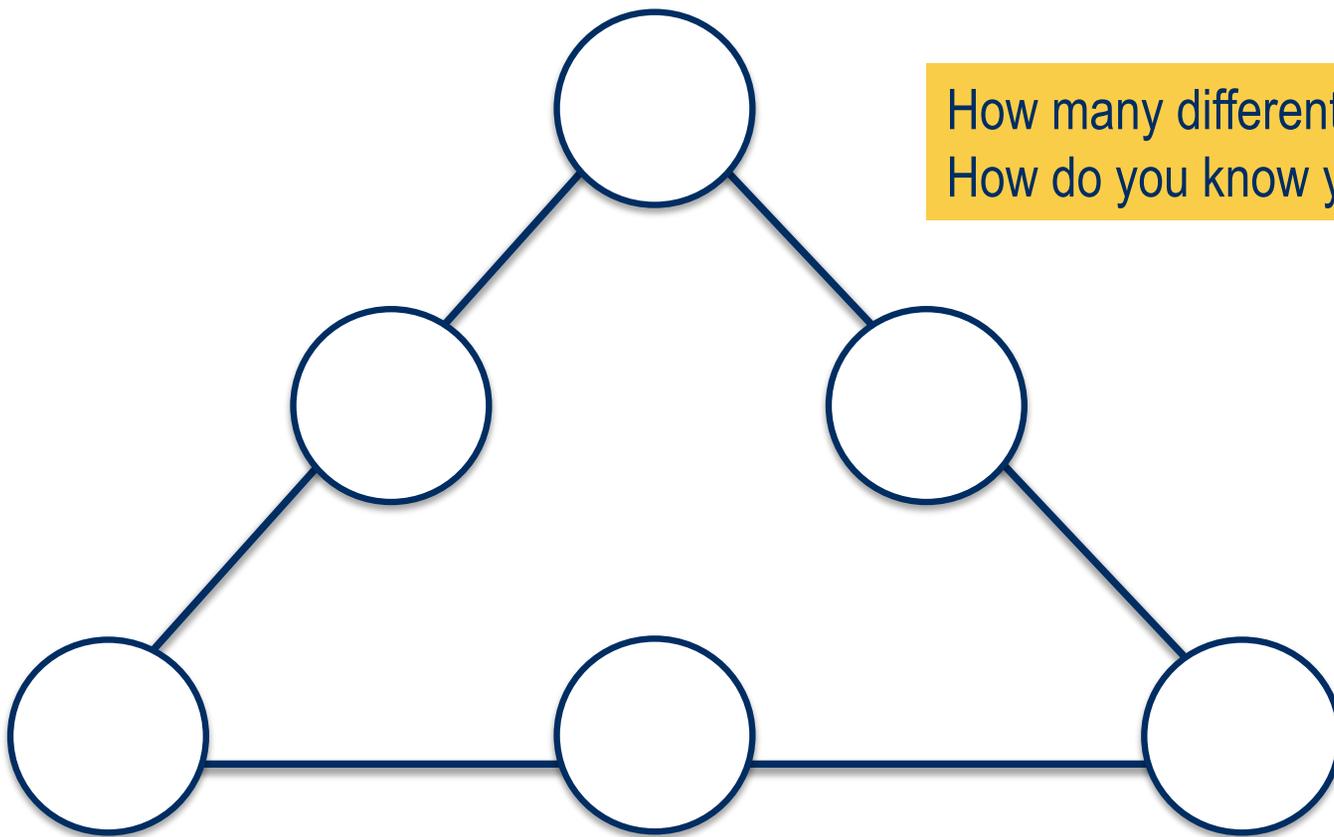
How do you know you have found them all?

9	9	9
7	7	7
3	3	3
1	1	1

Place the numbers **1**, **2**, **3**, **4**, **5**, and **6** in the circles, using each number exactly once.

Place them so that when you add up the values in the three circles on each of three sides of the triangle, they total the same sum.

How many different sums are possible?  
How do you know you have found them all?



Write equations for 10.  
How many equations are there?  
How do you know?

# DIFFERENT SOLUTION SPACES

- 1) No solutions
- 2) Unique solution (one correct answer)
- 3) Multiple but finite solutions
- 4) Infinitely many solutions

SOLUTION SPACE TYPES	EXAMPLE	SOLUTIONS
No solutions	Find an even number that when you double it equals 5.	Impossible
Unique solution	$5 + 7 =$	Only one possible answer
Multiple but finite solutions	How many three-digit numbers can you make using the digits 4, 5, and 6 and using each digit exactly once?	Six answers
Infinitely many solutions	Write equations for 10.	There is no limit to the equations that equal 10

Collect tasks and  
problems for practicing  
perseverance

# AUTO-ANTONYMS

- A word with multiple meanings, where one meaning is the opposite of the other
  - Words with different origins (etymologies) but where the form is the same (e.g., cleave, let)
  - Words that develop opposite definitions in use (e.g., *sanction*)
  - Different forms of English (e.g., to *table* a bill)
- Persevere by trying to build a list of these words

# SOME AUTO-ANTONYMS

- Sanction
- Left
- Oversight
- Dust
- Seed
- Stone
- Weather
- . . .

# PRACTICING PERSEVERANCE

- Name perseverance as a crucial set of skills and mindset
- Provide opportunities to develop perseverance
- Identify and comment on examples of it when you see it, in academic and other contexts

# PROVIDE OPPORTUNITIES TO LEARN THINGS FROM YOU THAT SCHOOL DOES NOT TEACH

- Your own experiences as a child or as an adult
- Your family histories
- How to engage with adults and a variety of everyday contexts
- Thoughtful respect for and understanding of other religions
- Sensitive and developmental consciousness about racism, and deliberate countering of common patterns

What are other good examples of this category?

# BUT IT ALL COMES BACK TO LISTENING AND COMMUNICATING WITH THEM

1. Skills of eliciting children's and young people's ideas
2. Ways to probe and ask more questions without interrogating
3. Manner that makes them feel heard
4. The ability to convey genuine interest and respect—at all ages

# VIDEO: RANDY



# WHAT DO YOU NOTICE THE TEACHER DOING?

- To get Randy to talk
- To understand his thinking
  
- What else would you ask?

# SOME TIPS FOR ELICITING THINKING

- Ask open-ended questions.
- Give plenty of time for the child to respond.
- Listen.
- Ask follow-up questions.

# WHAT MAKES A GOOD QUESTION?

## FREQUENT QUESTIONS

- How was camp (or school) today?
- What did you learn today?
- Was it fun?

## BETTER QUESTIONS

- What did you do particularly well today?
- What were you working on today?
- What was interesting at camp or school today?

# TYPES OF QUESTIONS

- Initial eliciting of children's thinking
- Probing their ideas
- Supporting them to make connections
- Guiding children to reason
- Extending their current thinking, and seeing how far they can be stretched

## Initial eliciting of children's thinking

- *I'd love to hear what you were doing here.*
- *Could you tell me more about this \_\_\_\_?*
- *What is your opinion about \_\_\_\_\_?*

## Probing children's ideas

- *Can you repeat that?*
- *What do you mean [by \_\_\_\_\_]?*
- *So what you're saying is \_\_\_\_\_?*
- *Can you give me an example?*
- *Why do you think that? How do you know?*
- *Why did you \_\_\_\_?*
- *How does that work?*
- *Walk me through your steps. Where did you begin?*
- *When you say \_\_\_\_, do you mean \_\_\_\_?*

## Supporting children to make connections

- *Does this remind you of anything?*
- *How does that remind you of \_\_\_\_?*
- *How is this related to \_\_\_\_\_?*

## Guiding children to reason

- *Why is that true?*
- *I'm really interested in that. Tell me more about it.*
- *Are there any more examples?*
- *How are these connected?*
- *Can this method be used for other things?*
- *What do you already know that could help you figure that out?*
- *What about [counterexample]?*

## Extending their current thinking, and seeing how far they can be stretched

- *How would you explain that to a \_\_\_\_ [younger] child?*
- *Would it still be true if \_\_\_\_?*
- *What would happen if \_\_\_\_?*
- *Can you show it (with a picture)?*
- *If someone said [a different, or wrong, answer], how would you respond?*

# USE WHAT MAKES YOU SPECIAL

- Close connection with your (grand)child
- Shared culture
- Opportunities to expose your (grand)child to new places and experiences
- Ability to enrich—not reproduce—what happens in schools

# THANK YOU!

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Slides will be available on my website

<https://deborahloewenbergball.com/>

(“Google” Deborah Ball)



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