

# HOW MANY QUESTIONS DOES A 4 YEAR OLD ASK EVERY DAY?



1875-2020



OTAGO  
MEDICAL  
SCHOOL

145  
YEARS

# EFFECTIVE QUESTIONING

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*Te Kura Hauora o Ōtākou*

# OBJECTIVES

- Understand the value and purpose of questions
- Describe, with examples, different types of questioning techniques
- Describe techniques to encourage student response to questions

Plan for the next 50 mins: me talking, 2 group tasks, questions via chat (thanks Tehmina), summary, time for questions

When working with students/ learners,  
what challenges you the most about  
asking them questions?

# HOW MANY QUESTIONS DOES A 4 YEAR OLD ASK EVERY DAY?



- Lost art of asking (curious) questions
- The environment changes to curb that natural enthusiasm for asking questions

# WHY DO YOU ASK STUDENTS QUESTIONS?

- Mentimeter poll
- <https://www.menti.com/dfoc9p5hov>

# PURPOSE OF QUESTIONING

- Promote discussion/engagement
- Increase understanding
- Establish what they know
- Encourage deeper thought
- Clarify mis-understanding
- Stimulate curiosity
- Did they do the homework?!
- Keep them engaged/attentive
- Keep them on their toes
- Keep them awake
- Communication skill
- Wellbeing
- Patient safety
- Understand who they are
- Aid decision making
- Posturing

*Questions create connection*

# ACTIVITY (PART 1)

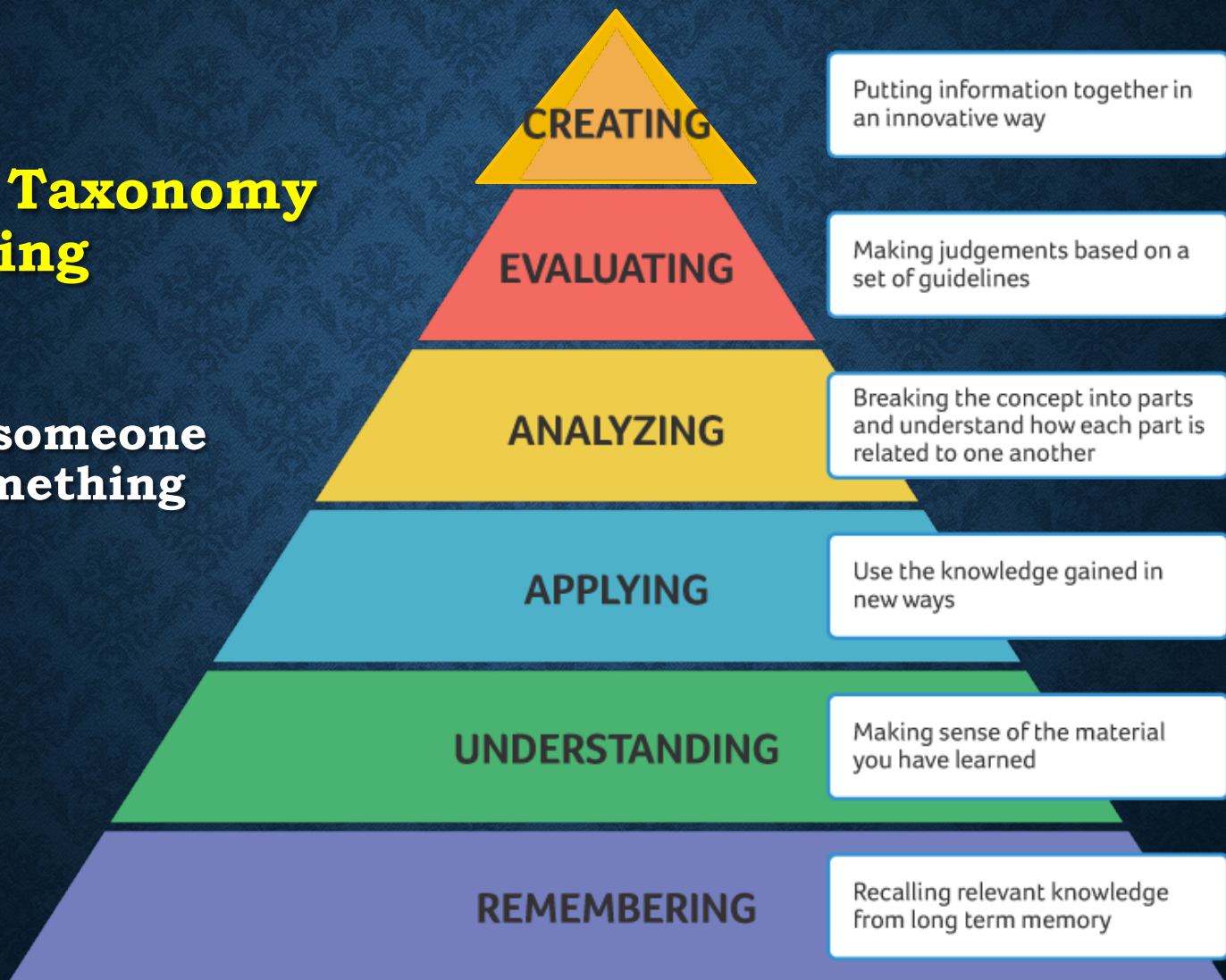
Individually think of one question you often ask your learners, jot on paper

1 min

*Questions open the door to possibilities*

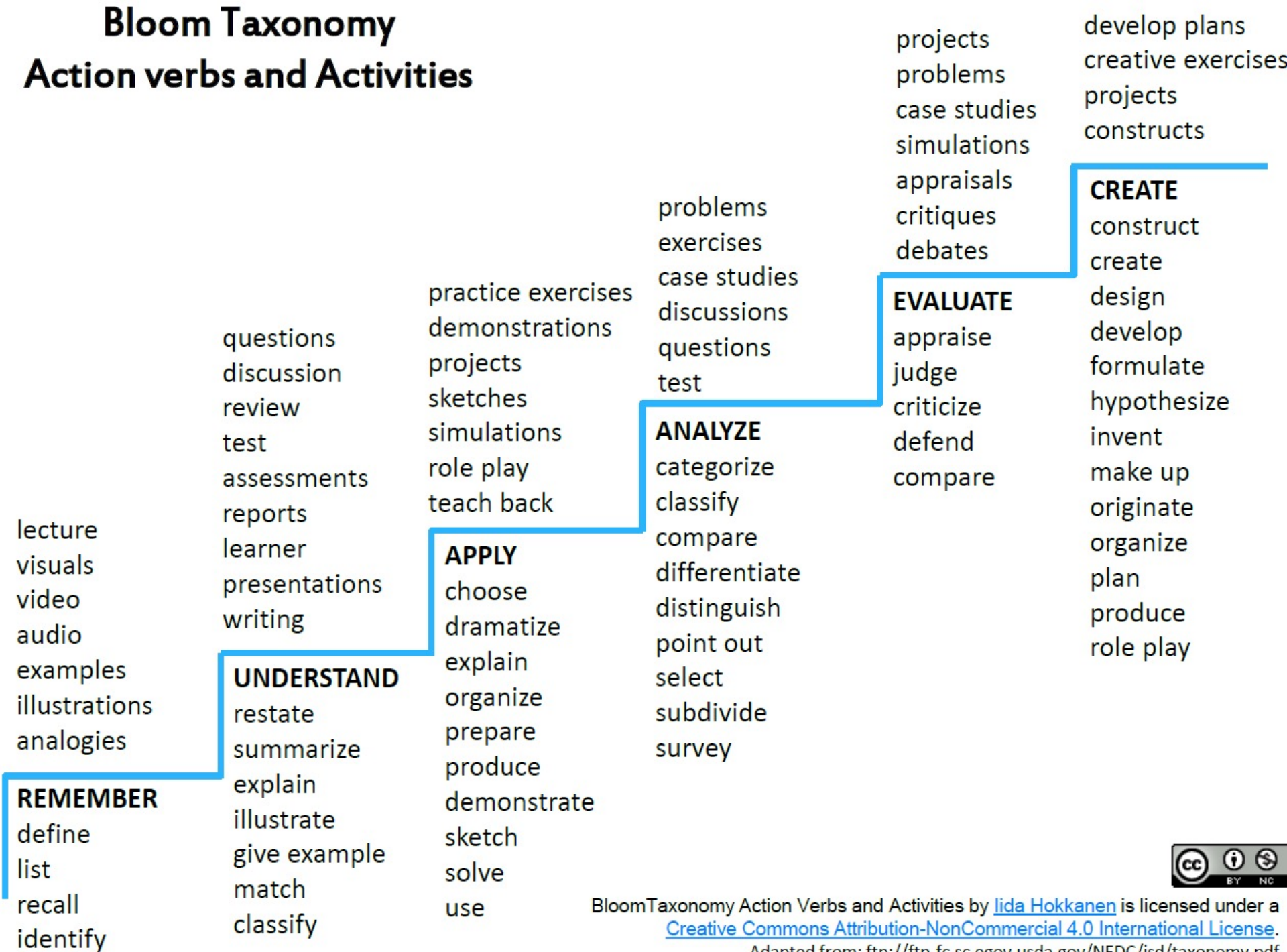
# Bloom's Taxonomy of Learning

How well someone knows something



# Bloom Taxonomy

## Action verbs and Activities



# ACTIVITY (PART 2)

- Breakout rooms – small groups (3 or 4)
- Brief introductions – 30 seconds each (name and department)
- One person in each group to be a nominated chair
- The chair is to click on the link provided in the chat box and share their screen  
<https://www.slideshare.net/IidaHokkanen/bloom-taxonomy-action-verbs-and-activities>
- This link will take you to the Bloom's chart I've just shown so you can refer to this during the discussion
- Each person to share their 'one question you often ask your learner'
- As a group classify each question according to Bloom's Taxonomy and discuss

6 mins

*Questions inspire action*

# FUNNELING APPROACH



- Tell me about gall stone disease? (open)
- Name the ways that gall stones can cause disease in patients? (closed/recall)
- Explain how gall stones cause pancreatitis? (process)

*Our natural instinct is to say something not ask something*

# SOCRATIC QUESTIONING

- Deeper level thinking
- Systematic
- Good for cognitive restructuring
- Develops questioning skills



<http://www.history.com/topics/ancient-history/socrates>

One of the best known teaching tools to engage students in higher level thinking

# SOCRATIC QUESTIONING

<b>Clarify</b>	What is the some of the more important assessment data you would collect about this patient?
<b>Probe Assumptions</b>	Are you assuming the elevated BSLs are due to a high intake of refined CHO? Explain why?
<b>Probe Reasons</b>	What are other reasons this patient could have elevated BSLs. What would you consider if the patients diet history revealed an acceptable intake of all type of CHO's ?
<b>Differing Perspectives</b>	Are there other family members or health professionals you could speak with to gather further information about this patient's dietary and /or medical history?
<b>Consequences</b>	If this patient reduced their CHO further or lost weight, what would you expect to happen next and why?

## **ACTIVITY (PART 3)**

Breakout rooms – same groups of 3 or 4 again

Take one of your groups initial question and as a group discuss how you could develop further questions using the Socratic questioning technique

6 mins

*Ask another question*

# HOW LONG DO YOU USUALLY WAIT, AFTER ASKING A QUESTION, BEFORE YOU STEP IN?

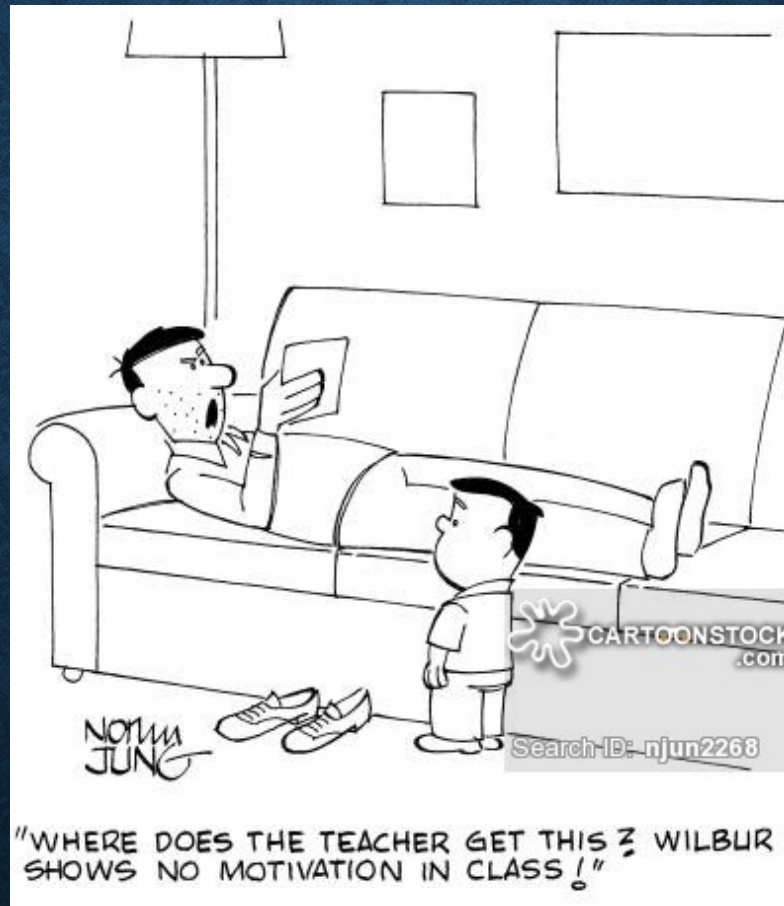
- 0 – 5 SECONDS
  - 6 – 10 SECONDS
  - 11 – 15 SECONDS
  - 16 – 20 SECONDS
- A
  - B
  - C
  - D

# RESPONDING TO QUESTIONS

# RESPONDING TO QUESTIONS

- Wait time/silence
- Immediate feedback – encouragement
- Redirecting – sharing the load
- Reflecting – you are listening
- Perception checking – checking your understanding
- Re/para phrasing – your own words, take it up a notch
- Acknowledge unknown – OK to say you don't know

# ROLE MODELLING



# OBJECTIVES

- Understand the value and purpose of questions
- Describe, with examples, different types of questioning techniques
- Describe techniques to encourage student response to questions

Plan for the next 45 mins: me talking, 2 group tasks, questions via chat (thanks Tehmina), summary, time for questions

# Do you know...

## why questioning is an important skill?

The fundamental purpose of asking questions, regardless of context, is to contribute to the shared pool of information and mutual understanding. Questioning can take place in a one-one situation or in groups of two or more.

### Why use questioning?

Questioning is helpful for learning and teachers should be aware of why they are asking questions.

Your reasons for questioning your students may include:

- Engaging the learner
- Testing the student
- Establishing understanding
- Clarifying ideas
- Exploring challenges
- Encouraging deeper thought



Give the person time to think, at least 7-10 seconds for higher order questions.

### Funnelling

The funnelling technique moves from a general open question to more specific questioning. It is a useful technique to adapt your questioning.

For example:

- "Tell me about gall stone disease?" (open)
- "Name the ways that gall stones can cause disease in patients?" (closed/recall)
- "How do gall stones cause pancreatitis?" (process)

### The sound of silence / wait time

Give students time to consider the question and what it means, and to construct a meaningful response. Most questions prompt an answer within 7-10 seconds. It can be hard to wait, but students may not answer a question for fear of looking stupid, not because they don't know the answer.

### Responding to answers

How you respond to the answers is as important as how you ask the questions. The answer may indicate whether the question was understood as you intended or needs to be reformulated. Immediate feedback is useful and is a stepping stone to the next question. Where possible, show an appreciation for answers and build on the student's response.

### Modelling

If you model effective questioning it is likely that the student will adopt a similar questioning style. The student should be prompted to ask questions and encouraged to ask "why" questions. If they ask "why" questions, it's still useful to probe their existing understanding.

Open questions	Closed questions	Leading questions	Recall questions	Process questions
<p>Open questions tend to draw out longer responses and may be used to explore thoughts or feelings.</p> <p><i>In what ways can I help you to learn best during the placement?</i></p> <p><i>What are your needs during this placement?</i></p>	<p>Closed questions can be used to elicit information or confirm understanding.</p> <p><i>How many weeks have you been in this placement?</i></p> <p><i>What specifically would you like to focus on during the placement?</i></p>	<p>Leading questions have the effect of pointing the student in a particular direction. A leading question can shape the rest of the conversation.</p> <p><i>I think that one of the most difficult skills for students to acquire is xxx. What do you think?</i></p> <p>The danger of using leading questions is that they require a respondent to make a conscious and deliberate effort to disagree.</p>	<p>Recall questions check knowledge.</p> <p><i>What are the three most commonly prescribed antibiotics in General Practice?</i></p>	<p>Process questions focus on thoughts and analysis or sharing of opinion.</p> <p><i>For this patient what are you thinking of prescribing and why?</i></p> <p><i>How do you decide on the priority tasks in this situation?</i></p>

### Practical Tips

**Consider the questions you are going to ask**  
Questions may occur spontaneously based on what is happening, but some questions can be pre-designed.

**Increase wait time**  
Don't underestimate the importance of thinking time.

**No hands up**  
Choose the student to answer. This helps keep all students on their toes. They should all be willing and able to answer questions.

**Think, pair, share**  
If in groups, ask students to discuss their answers with a partner and then share with the larger group.

Ask your student to think of questions for you! Get them practising questioning techniques and give them feedback on their questions

**Share the load**  
Some students may struggle to answer a question. If in groups, allow a struggling student to ask two colleagues, select the best answer, and explain why.

**Staged funnelling**  
Use adaptive questioning to increase the level of the questioning and challenge to match the students.

Advice - Don't use all of the strategies at the same time. Choose one and experiment.

### Some key questioning strategies

#### Non-verbal cues

The way you phrase a question, the tone you use and the body stance you adopt all influence how a student interprets a question. Allow students space to get a question wrong, without ridicule or eye rolling.

#### Formulating the question

It is easy to ask a closed, low-level recall question. Try to formulate more meaning through open, high-level process questions. When starting your questions, think about the why, what, how.

#### Adaptive questioning

Don't let questioning become a downward spiral of negative feelings. If a student doesn't know something it is not a bad thing and the student shouldn't be made to feel small because of it. Instead, maybe it's time to adapt your questioning.

### Readings

- Edmunds, S & Brown, G. (2010). Effective small group learning: AMEE Guide No. 48. Medical Teacher, 32(9)715-726.
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For further information and assistance, contact your local education or clinical education adviser:  
[otago.ac.nz/medicine/staff/support](http://otago.ac.nz/medicine/staff/support)

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[otago.ac.nz/medicine/staff/resources](http://otago.ac.nz/medicine/staff/resources)

Do you know ...

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When working with students/ learners, what challenges you the most about asking them questions?

**WHAT QUESTIONS/ INSIGHTS DO YOU HAVE?**