

Teacher's Guide for ASK *How'd They Build That?*

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Scoops (pg. 2-3)

Cranky? Try This Laptop

- How does this little laptop vary from the usual laptops?

Chimp Computer Whiz

- Describe what Keo has learned to do on the computer.
- What do scientists hope that apes will be able to do in the future?

Ancient ABC's

Vocabulary: abecedary

- Which alphabet was developed first?
- Explain why early people wrote on stone walls.

Nestor's Dock (pg. 4-5)

- List the precautions that were used in building the tower.
- What else might have caused the tower to collapse?

"Puzzle of the Pyramids" (pg. 6-13)

Why a Pyramid?

- What ideas were given to answer this question?
- Why do you think that the pyramids were built?

Building a Better Tomb

- Describe the early tombs.
- Why was stone chosen by Imhotep?

Laying the Ground Work

- How was the initial site prepared?
- How do we think that the Egyptians cut the large stones?
- How was rope made?

Heavy Lifting

- How much did the large blocks weigh?
- Explain the difficulty of using a single ramp.
- What is the problem with the spiral ramp?
- Explain the use of stairs.
- How would sleds help in moving the large stones?
- Explain why rolling the stones would be easier.

Wanted: Hard Workers

- Who may have built the pyramids?
- How do we know that at least some of the workers were happy to help build the pyramids?
- What was buried along with a dead person? Why?

"A House of Cards" (pg. 14-18)

- Where did Bryan get his idea of using strong cells?
- What is a repeating pattern?
- Describe Bryan's grid.
- How does he make his grid stronger?
- Why do his towers not fall down?
- What do these words mean, "keeps the structure from being top-heavy"?
- Why does he like to demolish his structures?

"That's a Problem" (pg. 19-21)

- Why did the Pisa Tower become a leaning tower?
- Describe three different attempts at straightening the tower.
- Explain an idea that you might have for straightening the tower.
- Why is it a good idea to just leave the tower leaning?

"Building Green" (pg. 22-27)

- What are green buildings?
- Why do buildings use so much energy?
- How is Clackamas High School saving energy?
- How do sun and slate create energy?
- Why does collecting rainwater help in conservation?
- Describe how some recycled items could be used in your home.
- How does a roof garden conserve energy?

"Green Dollhouses" (pg. 28-29)

- Choose the dollhouse that you like best. Explain your choice.
- Have fun creating your own green dollhouse.

Jimmy the Bug

- Why do we burp?
- Why is it polite to burp in some countries?

Marvin and Friends

- Marvin and his friends used ideas from this issue of ASK. Find the articles and list the page numbers where their ideas can be found.