Name Key

Bones & Joints Reading & Study Guide

RT = Right There T&S = Think & Search

Page	Question	Answer
1	How does your skeleton change as you grow? (RT) T&S	your bones fuse together
1	How many bones is the skull made of? (RT) T&S	26
	What functions does the skeleton provide? RT (T&S)	movement protection shape
2	How many ribs do you have? What do the ribs protect? (RT) T&S	24 ribs (12 pairs) heart ♡, lungs, spleen, stomach, liver

2

Joints are the places where two or more bones meet to allow movement. Bones are held in place by connective tissues. One kind of connective tissue is cartilage. It protects the bones and helps joints move smoothly. Ligaments is another type of connective tissues that holds the bones together at the joints.

Bones need muscles in order to move. The bones & muscles work together to allow movement.

Page	Question	Answer
2	How is it possible for the skeleton to move? RT (T&S)	joints make it possible and muscles
2	What are the 26 bones in your back called? Why are they important? RT T&S	vertabrae They allow your spine to bend and twist
3	What is the longest bone in your body called? RT T&S	Femur
3	Write a question from page 3 & answer it: RT T&S	
4	What are bones made of? RT T&S	calcium and pootein
4	What do you need to do to keep your bones healthy? RT T&S	EXERCISE A good diet

Name _____

Your Amazing Thumb

RT = Right There T&S = Think & Search

Page	Question	Answer
10	What does the opposable thumb allow you to do? RT (T&S)	pick up tiny objects touch tips of your fingers
10	What allows the thumb to work the way it does? (RT) T&S	a unique gliding joint (saddle joint)
10	What are phalanges? (RT) T&S	fingers

Bones on the Outside

RT = Right There T&S = Think & Search

Page	Question	Answer
11	What is it called if your skeleton is on the outside of your body? (RT) T&S	Exoskeleton
11	Who has exoskeletons? (RT) T&S	arthropods invertebrates
11	What is an exoskeleton made of? (RT) T&S	hard thin tubes and plates

Which is better? Decide after reading the chart on page 11. YOU MUST EXPLAIN WHY

	Internal skeleton or exoskeleton? WHY?
Protection	exoskeleton - defends and offers protection against enemies
Growth	internal - it grows with age
Movement	internal - works together with muscles and joints

Comparing Joints

RT = Right There T&S = Think & Search

Page	Question	Answer
12	How many joints are there in the human body? (RT) T&S	more than 200
12	A **hinge joint is the most common type in your body.** How does the hinge joint work? (RT) T&S	allows movement in one direction
13	There are two places to find the ball and socket joint. Where can you find them? (RT) T&S	shoulders and hips

13	Which ball and socket joint is stronger? WHY does it HAVE to be? RT · T&S	Hip - it holds up weight of body
13	What are gliding joints? RT T&	2 flat surfaces that glide smoothly over one another
13	Where can you find gliding joints in the human body? RT T&S	neck ankles spine wrists

The Broken Radius

Read the story on pages 5-7. Write each answer in complete sentences.

What is the name of the bone that Isaac broke?

For what reason was Isaac's arm put in a cast?

For what reason might some bones be in a cast for a longer time than others?

The Boneyard

Page	Question	Answer
8	How many bones does a newborn have?	about 300
	What are many bones of a baby made of?	cartilage
	How do they change as they get older?	Bones fuse together
	Why is a baby's skull fragile?	skull bones haven't fused yet
	What is the most easily broken bone in the body?	collarbone
	How is the patella different from any other bone?	it's not joined with any other bone
	Where are the smallest bones in your body?	in your ear
	What is an interesting fact about bone marrow?	make millions of blood cells every second

Teeth are NOT bone but are made of the hardest substance in our body.

This substance is called enamel.