

GEOGRAPHY-8

COMPLETE THE FOLLOWING
QUESTION SHEETS FOR
BRIDES - FI MY SIDE TO YOURS.

• pgs 62-67

• pgs. 68-79

• pgs. 80-85

• pgs. 86-89

• pgs 90-93

• USE YOUR OWN LINED PAPER.

• DUE THE FIRST DAY BACK.

BRIDGES - FROM MY SIDE TO YOURS^{GEOG} pgs. 62-67 (20 pts)

Answer w/ complete sentences.

1.) WHAT IS FAILURE? WHAT DO TODAY'S FAILURE PREVENT?

2.) 3.) THE BOARD OF TRADE DETERMINED THAT BOUCH... HE
HAD NOT INSPECTED OR...

4.) WHAT LESSONS WERE LEARNED AFTER THE FIRTH OF
TAY DISASTER?

5.) WHY DID THE ENGINEERS FOWLER AND BAKER HAVE TO
BUILD A BRIDGE ENTIRELY DIFFERENT F/ THE ONE THAT
HAD COLLAPSED?

6.) WHAT IS A CANTILEVER?

7.) WHAT IS INCHGARNIE? WHERE IS IT LOCATED?

8.) DEFINE: FALSEWORK IS...

9.) WHY WAS IT NECESSARY TO DEMONSTRATE THE
CANTILEVER PRINCIPLE FOR THE FIRTH OF FORTH BRIDGE?

10.) WHY WILL THE FIRTH OF FORTH BRIDGE NEVER BE
FINISHED?

BRIDGES - FROM MY SIDE TO YOURS ^{GEOG.} pgs. 68-79 (40 pts)

Answer w/ complete sentences.

1.) WHAT PROBLEMS MUST THE ENGINEERS OF MOVING BRIDGES SOLVE?

2.) WHAT IS A DRAW BRIDGE?

3.) WHAT IS A SWING BRIDGE?

4.) WHAT IS A LIFT BRIDGE?

5.) COMPLETION: "STRONG MINDS AND

6.) DESCRIBE JOHN ROEBLING. WHY WAS HE NEVER SICK?

7.) DESCRIBE CAPT. JAMES B. EADS. WHAT WAS HIS JOB?

8.) WHAT WAS THE PROBLEM THAT BOTH BRIDGE BUILDERS FACED?

9.) WHAT WAS JOHN ROEBLING'S DESIGN FOR THE BROOKLYN BRIDGE?

10.) DESCRIBE WASHINGTON ROEBLING.

11.) WHAT IS A CAISSON?

12.) DESCRIBE "THE BENDS".

13.) WHAT CAUSED "THE BENDS"?

14.) DESCRIBE EMILY ROEBLING. WHAT WAS HER JOB?

15.) WHAT KIND OF BRIDGE WOULD EADS BUILD ACROSS THE MISSISSIPPI RIVER?

16.) DESCRIBE THE CABLE ANCHORS OF THE BROOKLYN BRIDGE.

17.) HOW MUCH DID IT COST TO WALK ACROSS THE BROOKLYN BRIDGE?

18.) HOW MANY PEOPLE RODE THE TRAMS/^{LIGHT} TRAINS ACROSS THE BROOKLYN BRIDGE IN THE FIRST YEAR?

19.) WHAT HAPPENED TO THE FINANCIAL BACKERS OF THE EAD'S BRIDGE?

20.) COMPLETION: BUT THE GRAND BRIDGE.
SHAPES AND THEIR...

BRIDGES - FROM MY SIDE TO YOURS ^{GEOG} pgs 80-85 (30pts)

Answer w/ complete sentences.

- 1.) WHAT ARE THE BOOK ENDS?
- 2.) DESCRIBE JOSEPH B. STRAUSS?
- 3.) DESCRIBE THE COMBINATION BRIDGE DESIGNED BY STRAUSS?
- 4.) WHAT NATURAL FORCES DID ELLIS HAVE TO CONSIDER IN HIS DESIGN OF THE "GOLDEN GATE" BRIDGE?
- 5.) WHAT ARE CAISSONS? WHY DID THE CAISSONS FAIL AT THE "GOLDEN GATE"?
- 6.) WHAT ARE COFFERDAMS? WHAT MATERIAL WAS USED TO CONSTRUCT THE COFFERDAMS?
- 7.) DESCRIBE THE BRIDGE DESIGN OF IRVING F. MORROW?
- 8.) WHAT IS THE COLOR OF GOLDEN GATE BRIDGE? WHAT JOB WILL NEVER STOP AT THE GOLDEN GATE BRIDGE?
- 9.) WHAT IS HYDRAULIC CONCRETE?

12pts!!!) 10-15.) QUANTIFY ⁸ THE GOLDEN GATE BRIDGE.

BRIDGES - FROM MY SIDE TO YOURS^{GEOG.} pgs. 86-89 (40pts.)

Answer w/ complete sentences.

1.) WHAT IS CEMENT?

2.) WHAT IS CONCRETE?

3.) WHAT IS AGGREGATE?

4.) COMPLETION: THERE ARE FEW...

5.) WHAT IS POZZOLANA?

6.) WHAT IS POURABLE STONE?

7.) WHAT IS PORTLAND CEMENT?

8.) WHAT IS CONCRETE GOOD FOR? NOT GOOD FOR?

9.) WHAT IS REINFORCED CONCRETE?

10.) DEFINE: ARTIFICIAL MEANS...

NEEDLE
OR NOTES

STALAGMITES MEANS...

11.) WHY IS THE ALVORD LAKE BRIDGE FAMOUS? QUANTIFY IT.

(over)

12.) WHY WAS CONCRETE CONSTRUCTION GOOD POLITICS?

13.) WHAT ARE THE DESIGN ADVANTAGES OF CONCRETE?

14.) WHEN IS CONCRETE STRONGEST? WHAT WAS DONE TO THE STEEL RODS TO KEEP THE CONCRETE UNDER CONSTANT COMPRESSION?

15.) WHAT DOES PREFABRICATING CONSTRUCTION MEAN?

16-20.) WHAT DOES IT MEAN TO PUT "THE STEEL IN TENSION AND THE CONCRETE IN COMPRESSION"?

BRIDGES - FROM MY SIDE TO YOURS^{GEOG.} pgs. 90-93 (20pts)

Answer w/ complete sentences.

1.) COMPLETION: THIS MIRACULOUS CONSTRUCTION MATERIAL SPLIT...

NOODLE AND NOTES

2.) WHAT IS A PREFABRICATED BRIDGE?

NOODLE AND NOTES

3.) WHAT IS PRESTRESSED CONCRETE?

4.) COMPLETION: TAKE A RIDE ON THE INTERSTATE HIGHWAY SYSTEM AND...

5.) WHAT DO ENGINEERS PREFER? WHAT DO THEIR CLIENTS PREFER?

NOODLE AND NOTES

6.) WHAT IS A CANTILEVER?

7.) WHAT WAS THE SHIMA-MARUYAMA BRIDGE BUILT TO WITHSTAND?

8.) COMPLETION: SIMPLICITY IS A RESULT OF...

9.) WHAT IS COMPUTER MODELING?^{BRIDGES}

10.) WHAT OPPORTUNITIES DO BRIDGES PROVIDE US?^{4?}