

# ***The Rivers***

## ***a source of life***



### **RIVER FEATURES**

The river is a natural watercourse that flows into another river, a lake or the sea.

Some rivers flow all year long, others flow seasonally. Some are very long, others are short, but all the rivers have common features.

The course of a river is usually divided into three parts:

- The **UPPER COURSE** is the mountain part, close to the source, with steep gradients. Here water flows fast.
- The **MIDDLE COURSE** is the stage where the river flows in the lowland and its tributaries join it. It is wider and deeper. Water flows more slowly. Meanders are the main feature of the middle course.
- The **LOWER COURSE** is the part near the sea. Here the river is much wider, flatter and flows very slowly.

### **RIVER VOCABULARY**

**SOURCE** - where the river begins. The source can be: a **glacier**, **melting snow**, a **lake** or a **spring**

**SPRING** - a place where water comes out of the ground

**WATERFALL** - water that falls from a high point

**CURRENT** - the movement of flowing water

**DAM** - a barrier across the river to stop the flow of water

**RIVERBED** the ground at the bottom of a river

**RIVERBANK** - each side of the river

**CHANNEL** - the path of a river. It is made up of the riverbed and the banks

**STREAM** - a small, narrow river

**TRIBUTARY** - a stream that flows into a river

**CONFLUENCE** - the point where two rivers meet

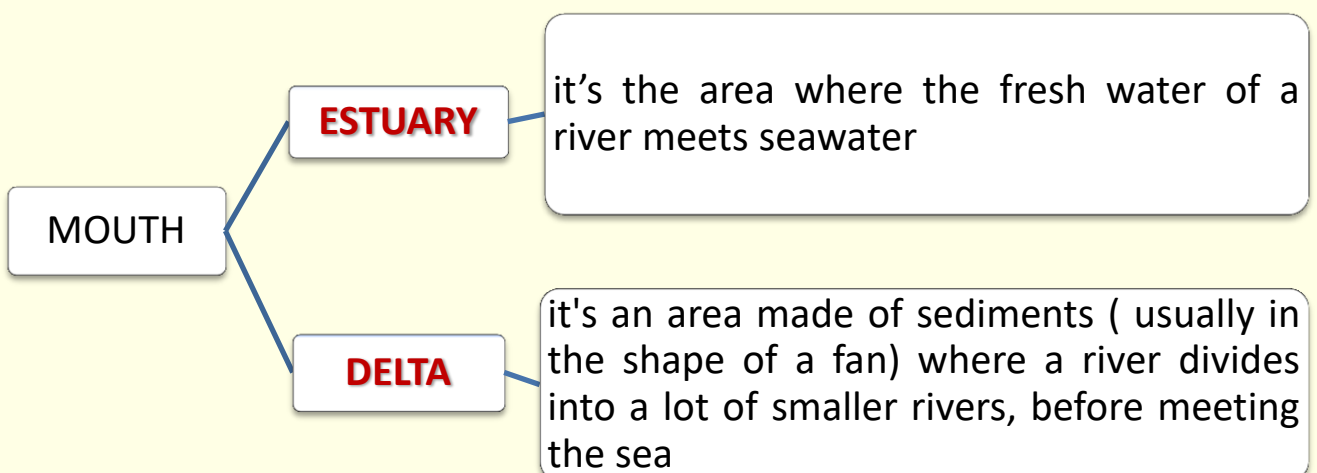
**RESERVOIR** - An artificial lake created by a dam to store fresh water

**MEANDER** - a bend in a river

**FLOOD** - an overflow of water, when the river rises and goes over its banks

**FLOODPLAIN** – a plain along the course of a river that is often flooded

**MOUTH** - it's the final part of the river, where it joins the sea. Depending on the shape it can be:



## WEBSEARCH

➡ 1- For each of the following rivers find out if its mouth is a delta or an estuary

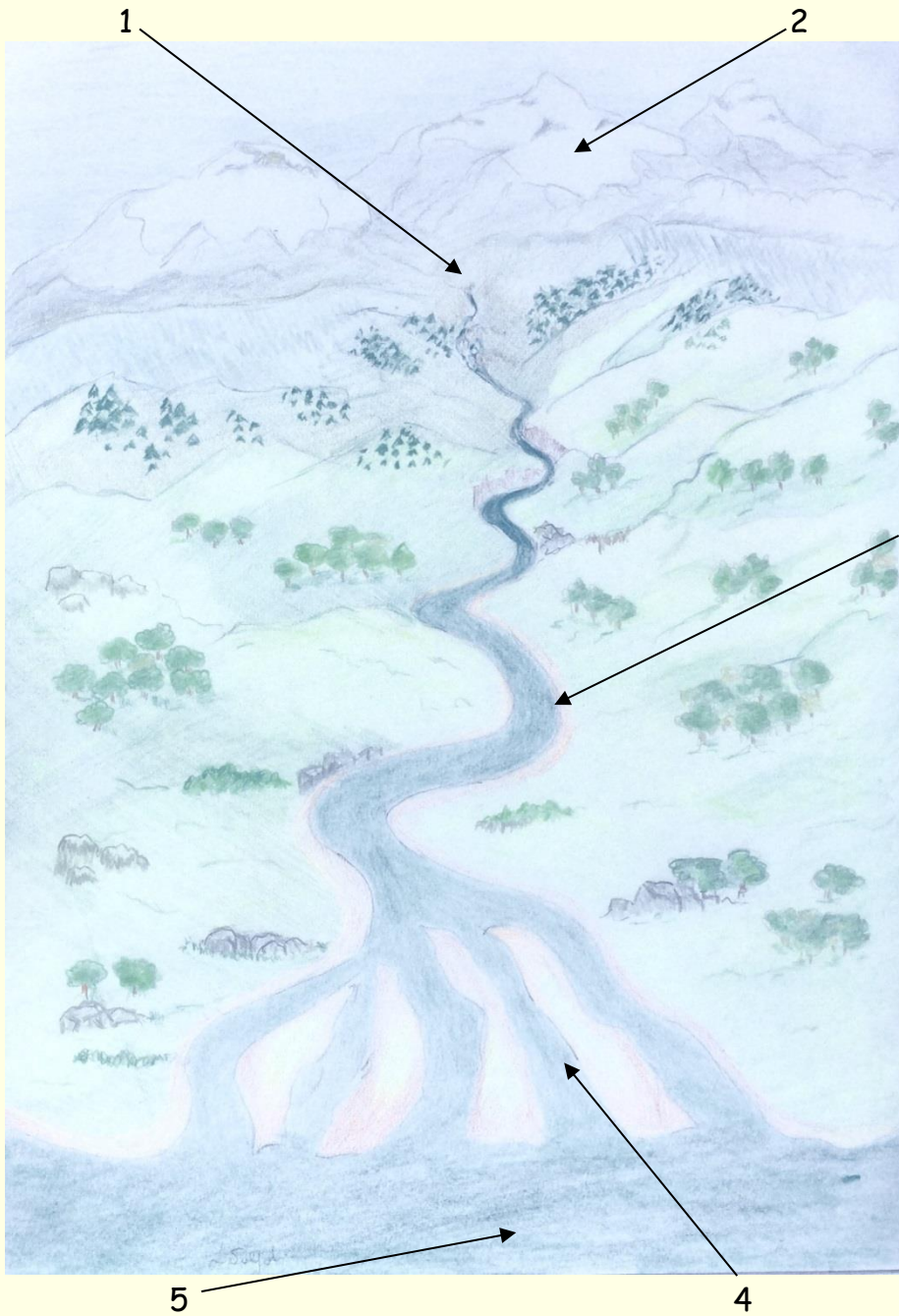
	DELTA	ESTUARY
The ELBE		
The RHONE		
The PO		
The THAMES		
The DNEPR		
The RHINE		
The SEINE		
The VOLGA		
The DANUBE		
The SEVERN		

➡ 2 Look at the video, play and then complete the following grid  
<https://www.youtube.com/watch?v=t8FrY4tGgnY>

River name	Position/ Continent	Length in Km	Curiosities
1			
2			
3			
4			
5			
6			

River vocabulary  
Activity Sheet 1

This is a river map.



A) Find and label:

- 1 - .....
- 2 - .....
- 3 - .....
- 4 - .....
- 5 - .....

B) The course of a river can be divided into three parts. What are they?

.....  
.....  
.....

C) Draw three arrows in the map corresponding to them.

## WORD SEARCH

➡ Look for the 15 words listed in the column on the right.

Words are placed forward, backward, diagonally, up and down

Z C S W Q V L L A F R E T A W  
N X U H S R G U N O S K D R O  
V U N R B E A H T U O M E W R  
U R I P R S U V H A T V B K Q  
E E M E G E Z P G F I E R M D  
N D A S N R N J T R Y L E L Y  
M N D T I V W T F R B Z V Q G  
B A T U R O Z A A H V W I O M  
R E O A P I H T T F T Q R F L  
P M I R S R U P R L Q S Y L P  
P U U Y J B J Q H M E Y A O V  
A D F C I S O U R C E D T O H  
M Y C R I V E R B A N K M D B  
B R T M A E R T S K S M E H Z  
N X P F A Z F I K X X T R S J

CURRENT  
DAM  
ESTUARY  
FLOOD  
MEANDER  
MOUTH  
RESERVOIR  
RIVER  
RIVERBANK  
RIVERBED  
SOURCE  
SPRING  
STREAM  
TRIBUTARY  
WATERFALL

## WORD SCRAMBLE

⇒ Here are 20 words concerning rivers. Unscramble the letters to form 20 river words

KNARRIBEV

LEHNANC

TENRCUR

MAD

YESARUT

GRINPS

ENDREAM

HUTOM

OVERRISER

**ERRIV**

**DRIBERVE**

**CURESO**

**YABRITRUT**

**LAFTRAWEL**

**CENEFLONUC**

**TEALD**

**DONALIFLOP**

**RATMES**

**ALEK**

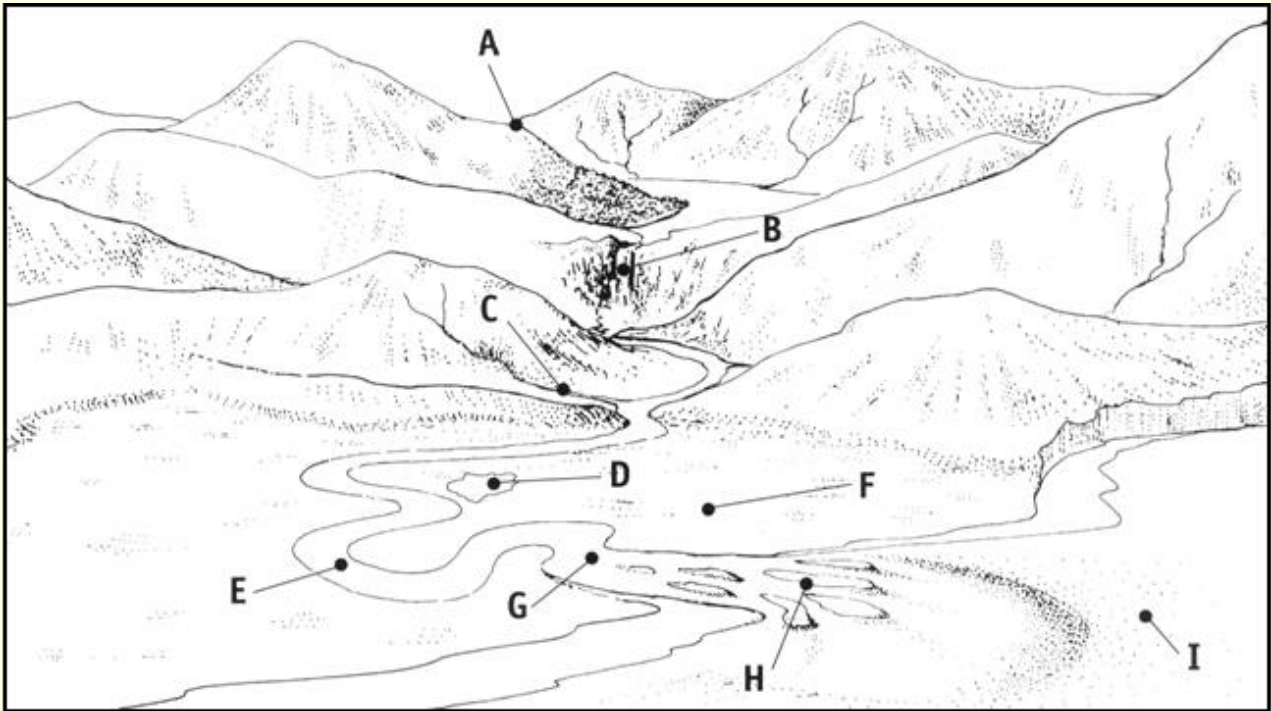
**RICALEG**

**River vocabulary  
TEST**

Name \_\_\_\_\_ Class \_\_\_\_\_

The picture shows the course of a river from the hills to the sea.

What are the features marked at **A, B, C, D, E, F, G, H** and **I**? Choose the correct labels from those listed below and write the letter in the boxes.



mouth

lake

waterfall

delta

meander

tributary

flood plain

sea

source

Use the picture to help you fill in the gaps in these sentences:

1-The place where a river starts is called its \_\_\_\_\_.

2-A \_\_\_\_\_ is a smaller river or stream which flows into a larger one.

3- A large bend in a river is called a \_\_\_\_\_.

4- A \_\_\_\_\_ is an area of land roughly triangular in shape which forms where a river enters the sea.

5- A \_\_\_\_\_ is water dropping from a higher point

6- A \_\_\_\_\_ is a flat area near a river composed of sediment deposited during floods.

7- An artificial lake used to collect and store water is a \_\_\_\_\_

8- A \_\_\_\_\_ is a large mass of ice and cumulated snow.



# RIVER USES

## TRANSPORTATION

In forested regions rivers are used to float and transport logs, saving effort and costs.

## NAVIGATION

A lot of rivers are navigable and provide routes for trade, goods and people transport.

## IRRIGATION

It is the method of supplying water to plants artificially. There are a lot of different ways to get water from a river.

The oldest system is represented by **irrigation canals** built in Mesopotamia about 4,000 years ago and still widely used in many parts of the world.

Another very old system, used in arid regions in the past but still in force today, is represented by **spate irrigation**.

It is based on the exploitation of seasonal river floods and a network of canals to convey water from the river to the fields.

From canals water can be better employed to irrigate crops when farmers dig small ditches between rows of crops. This system is called **furrow irrigation**. So doing water is better distributed in the fields.

To deliver water from the river to fields farmers often use **pumps**.

## A SOURCE OF FOOD

In the past, but still nowadays rivers provide an important source of nutrition. Along them people hunt wild birds such as ducks or, by means of nets, they catch fish and they collect shellfish.

So doing, they ensure food for themselves and their families.

Rivers are also a source of **income** for people who establish fish farms and fisheries along them.

In some areas of the world rivers provide people with water to DRINK, to HAVE A BATH, to WASH VEGETABLES and TO DO THE WASHING.

### **A SOURCE OF HYDROPOWER**

Rushing water is used to produce energy.

In the past people built watermills. They used the force of the water's movement to power other machinery.

At the end of the 19<sup>th</sup> century scientists understood how to use hydropower to generate electricity and in 1882 the first hydroelectric plant was built in the USA.

In **Italy** the first was set up in 1885 and until the 1950s, almost all the electric energy produced came from water. Today we are the world's 14th largest producer of hydroelectric power.

### **FOR RELIGIOUS BELIEFS**

In some parts of the world some rivers are considered sacred.

For example, the Ganges is the holy river to Hindus. They believe that bathing in its water purifies the soul and washes away sins. The ashes of the dead are dissolved in it because Hindus associate the river with the goddess Ganga.

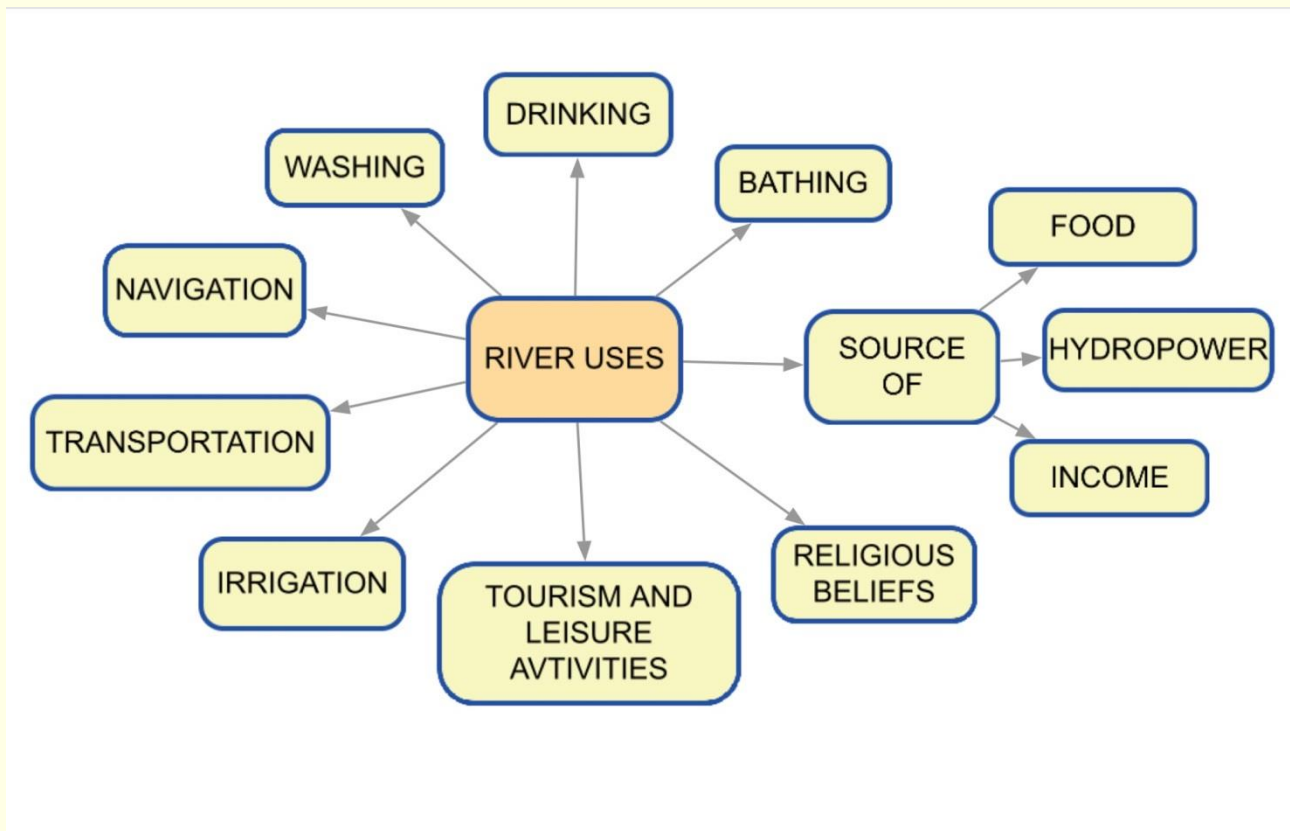
Rituals in its water amplify Ganga's kindness.

### **TOURISM and LEISURE ACTIVITIES**

River tourism offers people a lot of relaxing or sports activities, the chance of sightseeing and doing new experiences such as a holiday on a houseboat.

People can also boat, have excursions or river cruises, have picnics, hire a barge, walk, fishing, birdwatching or cycling along the river, do water sports such as rafting, canoeing, sailing, or kayaking, have a swim or go ice skating in winter in very cold regions.

## River uses: mind map



## Glossary

float	<b>galleggiare</b>	provide	<b>fornire</b>
trade	<b>commercio</b>	goods	<b>merci</b>
supply	<b>fornire</b>	spate	<b>ondata</b>
exploitation	<b>sfruttamento</b>	convey	<b>trasportare</b>
ditch	<b>fosso</b>	furrow	<b>solco</b>
hunt	<b>cacciare</b>	ensure	<b>assicurare</b>
income	<b>reddito</b>	belief	<b>credenza</b>
soul	<b>anima</b>	sin	<b>peccato</b>
ash	<b>cenere</b>	hire	<b>noleggiare</b>
barge	<b>chiatta</b>	leisure	<b>tempo libero</b>

River uses  
**Activity Sheet 1**

⇒ Complete the sentences using words from the box

Transportation	navigable	irrigation	source of income
source of hydropower	religious beliefs	sport activities	tourism
bathing	source of food	drinking	washing

- 1- When its water is used to produce electricity the river is a \_\_\_\_\_  
\_\_\_\_\_.
- 2- A river is \_\_\_\_\_ when it is sailed on by  
boats, ferries or ships.
- 3- In poor villages situated along a river, its water is used  
for \_\_\_\_\_, for \_\_\_\_\_ and  
for \_\_\_\_\_.
- 4- When fisheries are set along a river it is used as a \_\_\_\_\_  
\_\_\_\_\_.
- 5- For \_\_\_\_\_ Hindus dive into the Ganges to  
purify their soul.
- 6- If people camp by a river or take a cruise on it, it is a source of  
\_\_\_\_\_.
- 7- When people make tree trunks float down a river, it is used  
for \_\_\_\_\_.
- 8- Canoeing, rafting and kayaking are river  
\_\_\_\_\_.
- 9- \_\_\_\_\_ means when the river is used to supply  
land and plants with water using pumps, ditches or canals.
- 10- When fisheries are set up along a river, it is considered as a  
\_\_\_\_\_.

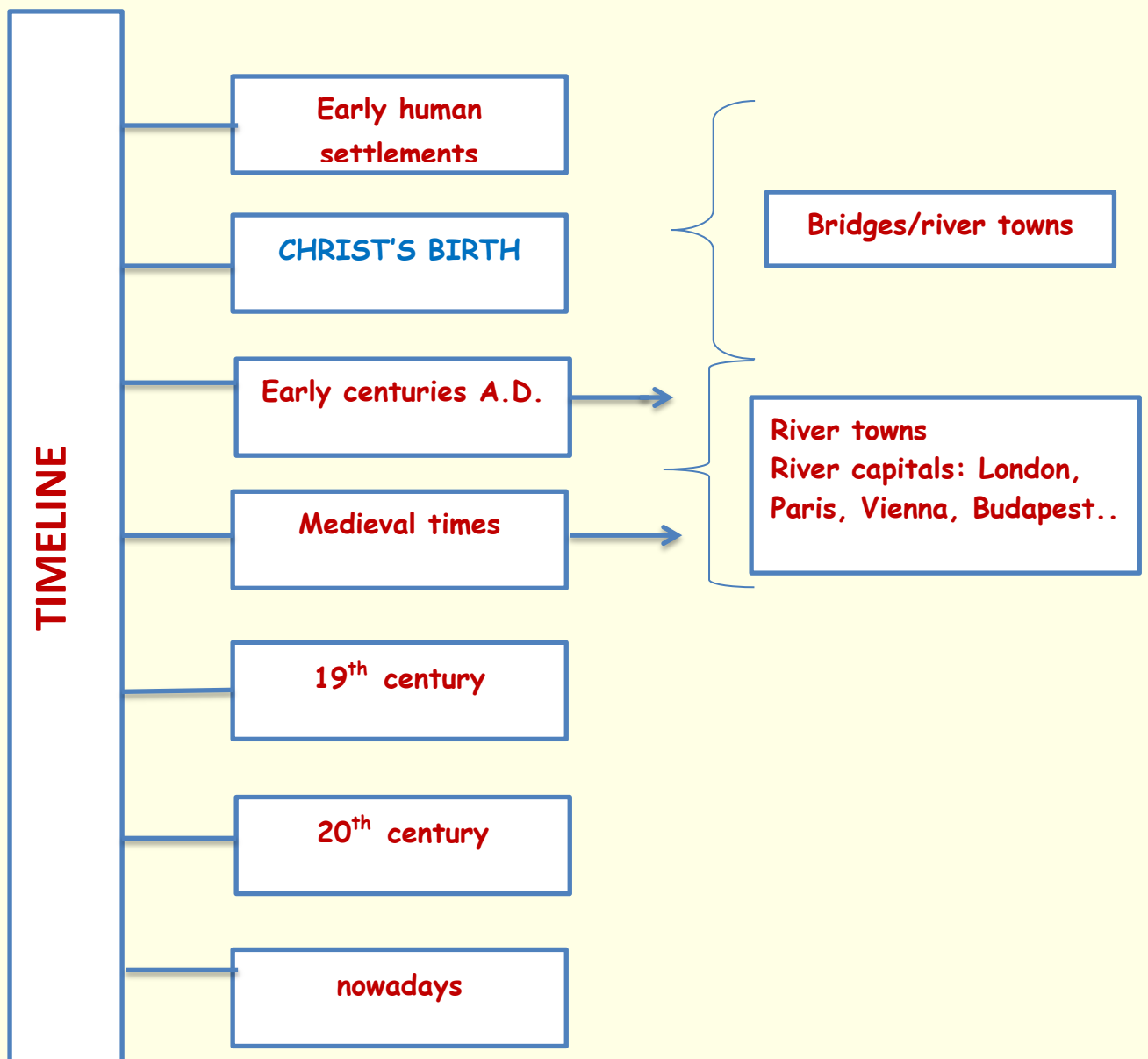
## RIVER PUZZLE

⇒ Cut the puzzle pieces, gather them and flip them over, then pick up a card and describe it.



## IMPORTANCE OF RIVERS

➔ Class discussion. Look at the timeline and think of the river uses. For the periods quoted say why the river was or is important.



# ***THE TICINO: OUR GOLDEN RIVER***

The Ticino rises in Val Bedretto in Switzerland.

It's about km 284 long. It's the affluent and the outflowing stream of Lake Maggiore.

It's a tributary of the Po which it joins at «Ponte della Becca», a bridge located south of Pavia.

Along its upper course in Switzerland and its middle course in Italy, there are a lot of hydroelectric plants for the production of electricity.

The Italian ones are:

- 
- 
- 
- 

For irrigation people have built a lot of artificial canals.

The most important are:

- Canale Regina Elena
- Canale Villoresi
- Canale Industriale
- Naviglio Grande
- Naviglio Sforzesco
- Naviglio Langosco

## Final Activity

### Build up a 3D River Basin

#### Produce a 3-dimensional river basin

Include:

- ✓ The different parts of a river from the source to the mouth e.g, tributary, confluence, waterfall...

(Think about the features of the upper, middle and lower parts of your river )

- ✓ Label your model using the correct geographical terminology
- ✓ Show how humans use the river
- ✓ Make sure your model is not too large so you can transport it to school. Preferably no bigger than A3.

#### STEP 2

- ✓ Describe your model
- ✓ Compare it with models from other groups
- ✓ Score them

#### STEP 3 FLIPPED CLASS

- ✓ Explain your model to class 1C