



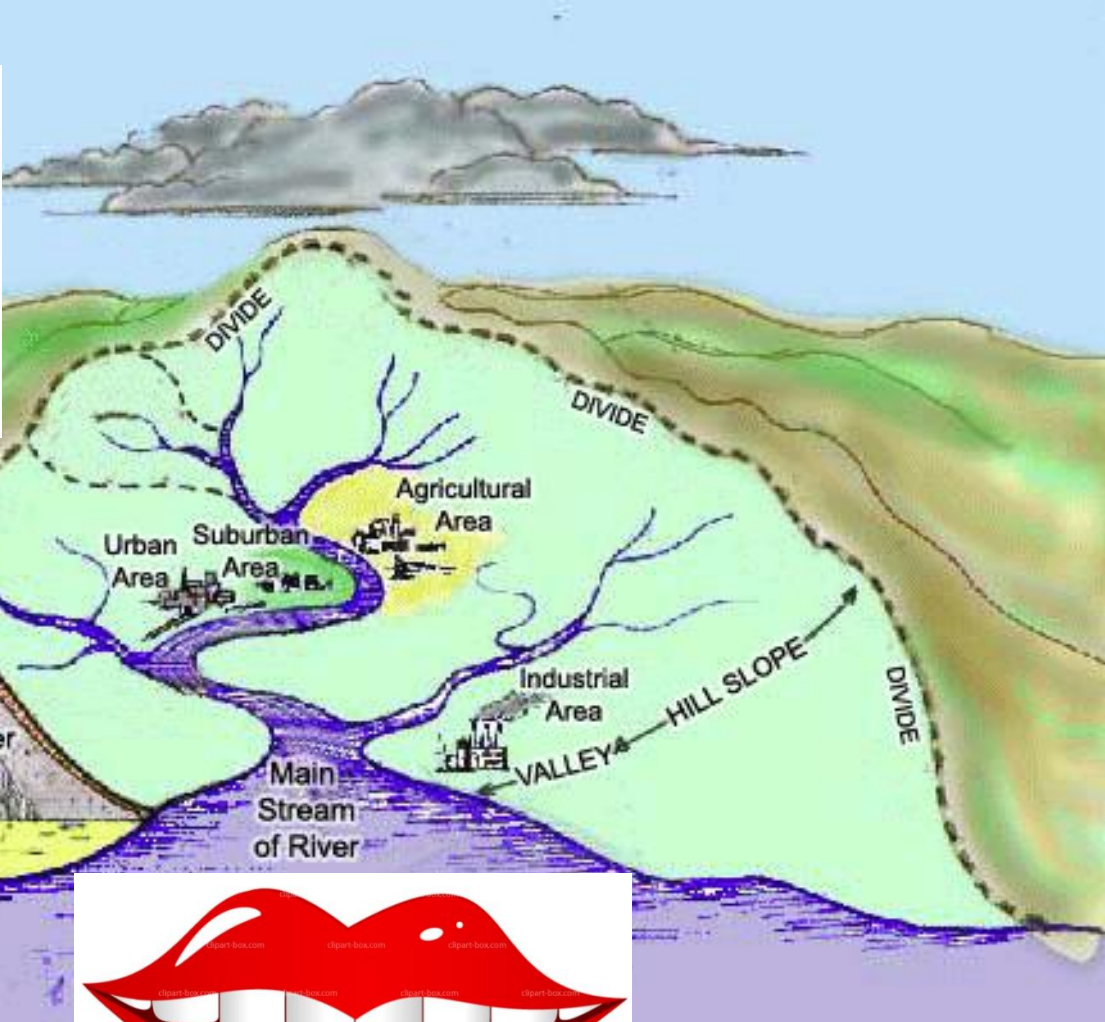
# **TOPIC 3: DISTINCTIVE LANDSCAPES**

**3.2a: WHAT PHYSICAL PROCESSES SHAPE LANDSCAPES?**

**ai) The formation of river landforms**

**10/05/2018**

# Let's get started: 'Its all about the basin'



Rivers start life up in the mountains, as a trickle. The start point is known as the **SOURCE**. As they travel down towards the sea they collect more water. Where a river enters the sea is known as the **MOUTH**. The area a river drains is called a **DRAINAGE BASIN**. Think of it as being like your sink (wash basin at home).

# LEARNING IS SUCCESSFUL WHEN I ...

## Know:

- ✓ What v shaped valleys, waterfalls, gorges, meanders, floodplains, and levees are
- ✓ The three stages of a river's course

## Understand:

- ✓ How geomorphic processes form river features

## Employability Skills:

- ✓ Resilience/Determination
- ✓ Communication



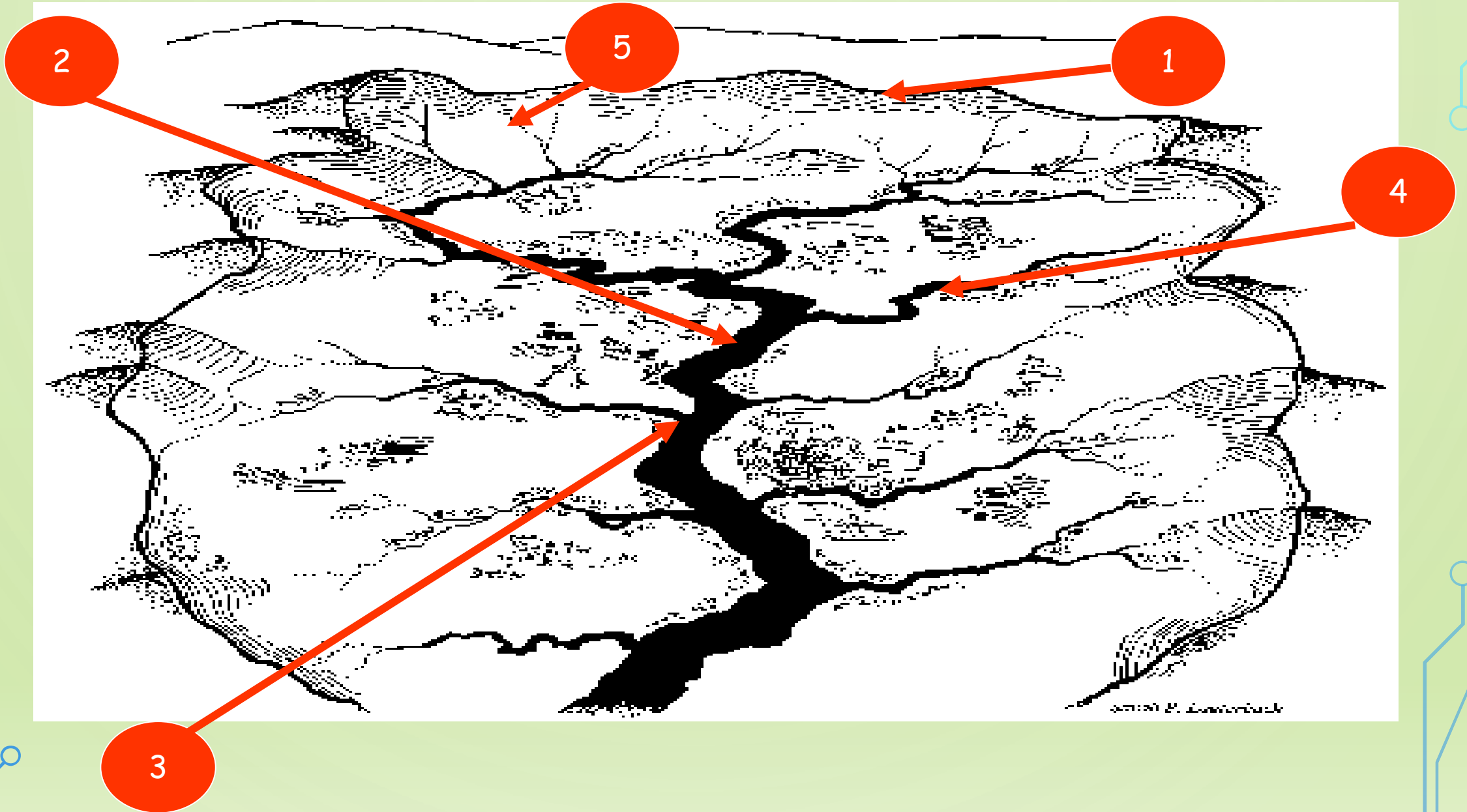
# OVER TO YOU: 'Its all about the basin'

Watershed	Where a river begins
Source	Where the river flows
River Basin	An area of land drained by a river and its tributaries
Tributary	Where the river flows into the sea
Confluence	An imaginary line which shows an area of highland forming the edge of the basin
Channel	A stream or small river flowing into a main river
Mouth	Where the two rivers join

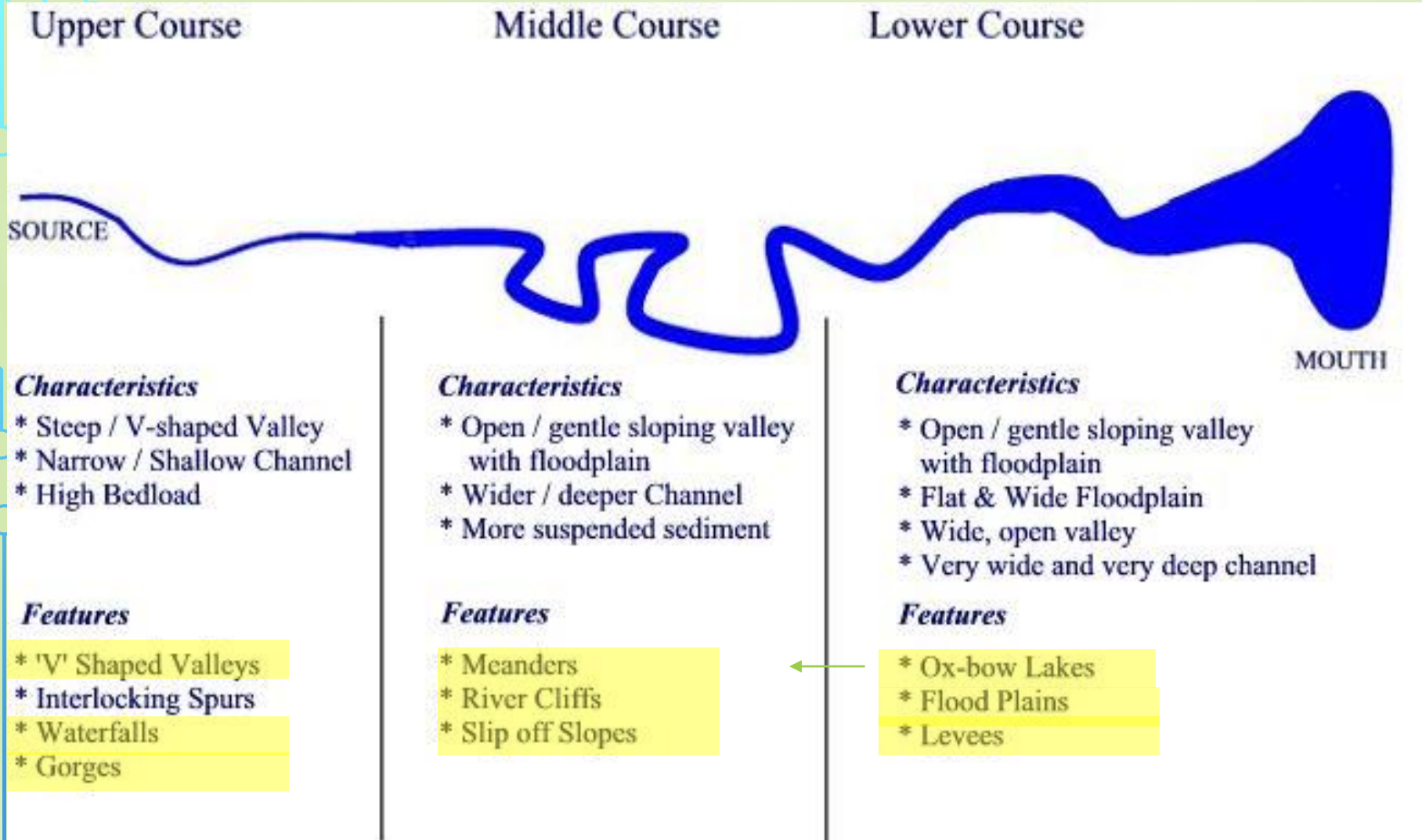
**Get tooled up with the geo-lingo!**

Match the correct definition to the key-word

# The Drainage Basin



# The river's journey through its basin

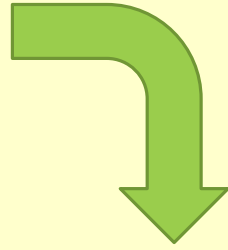


The river's journey is known as its 'course'

There are three stages or parts to this journey

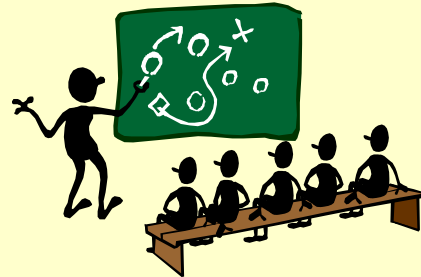
- U. C.
- M. C.
- L. C.





**PRESENT NEW INFORMATION**

**LOOK, LISTEN, LEARN**





# Upper Course Features – What and Why?



## 'V'-Shaped valley

Near the source the river is very narrow and flowing down a steep gradient. This gives it **E to E** its channel **V**. **W** and **M.M.** gradually widen the valley.



## Waterfall and Gorge

If the river flows from **H (M.R.)** to **S (L.R.)** rock a waterfall may form. Over time this waterfall will retreat, leaving behind a gorge.



**Over To You:** Use the clips and the text book to create your own diagrams and notes explaining the formation of river features found in the upper course.







# Middle Course Features – What and Why?



## Meanders

In the middle course the gradient becomes more gentle. The river widens as it erodes its **B**. This is called **L** erosion. (**L** means across).



## Ox-Bow lakes

The river breaks through the meander necks during floods and this can result in sections of the loops being cut off.

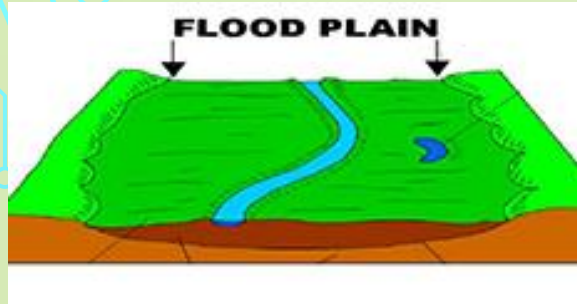
**Over To You:** Use the clips and the text book to create your own diagrams and notes explaining the formation of river features found in the middle course.

**Word Bank:** erosion, deposition; fastest flow; slowest flow; outside bend; inside bend; slip off slope; river cliff; hydraulic action; abrasion



# Lower Course Features – What and Why?

10  
mins



## Floodplains

As the river heads towards its mouth, the valley becomes **F** and **W**. The adjacent flat land either side of the river is called a **F.P.**

## Levees

These can be natural (made by the river) or man-made. Natural levees are created during times of flood.



**Over To You:** Use the clips and the text book to create your own diagrams and notes explaining the formation of river features found in the lower course.

**Word Bank:** deposition; levee; flood; silt; alluvium




**APPLY TO  
DEMONSTRATE**

SHOW THAT I UNDERSTAND



# WHAT WOULD AN EXAM QUESTION LOOK LIKE?

6  
mins



Describe the formation of one named river landform that you have studied. You may use diagrams to help you [4]

## Steps to Success

1. Name the landform
2. You may 'translate' as you should!! An annotated diagram could get you FULL marks!

# WHAT WOULD AN EXAM ANSWER LOOK LIKE?

Describe the formation of one named river landform that you have studied. You may use diagrams to help you [4]



Page  
n/a

8  
mins peer  
assess

Named landform: [no marks awarded for this but without it the rest of your answer scores zero]

Likely to be mentioning geomorphic processes like Erosion, Weathering and Mass Movement.







**REVIEW**

**WHAT HAVE I LEARNT?**



Something I don't really get from today's lesson is .....

.....

## Review time

1. Formed in the upper course when a river moves from hard to soft rock
2. The fastest flow of water in a meander is found here ?
3. SOS – which meander bend needs help?
4. There's one not far from here
5. 'Bye bye Miss American Pie ... rode the Chevy .....



5  
mins

Something I have totally nailed from today's lesson is .....

.....

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