USING VISUAL & GRAPHIC ORGANIZERS TO LEARN & REMEMBER

When you create visual and graphic organizers, you tend to select and process information at a deeper level, which increases the likelihood that you will understand and learn the material better. As you look through the three different types of organizers below, reflect on which ones will work in your current classes.
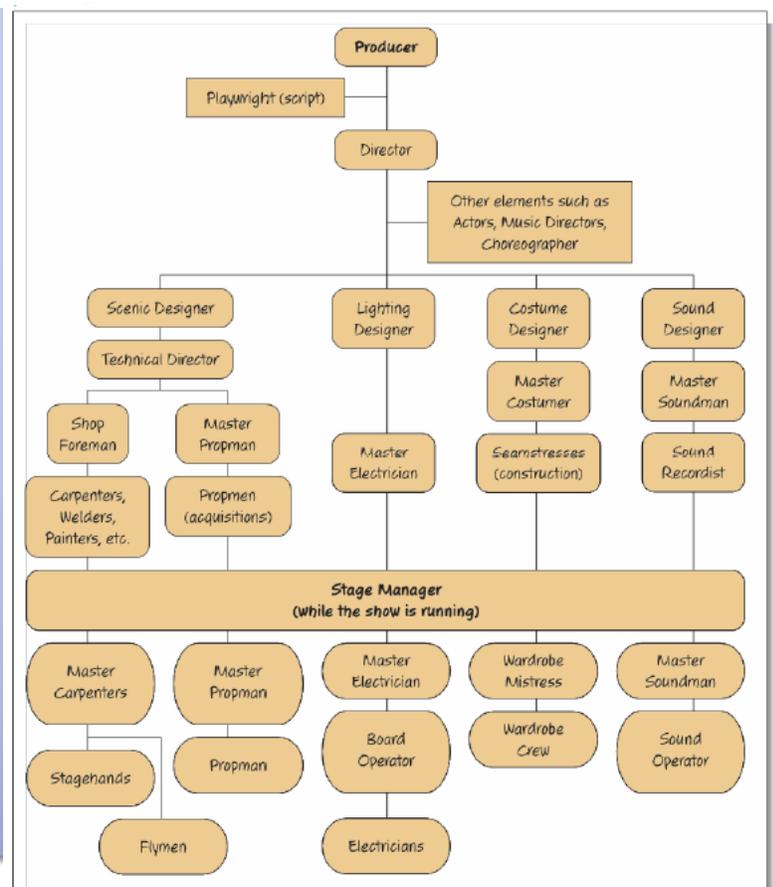
LINEAR ARRAYS

- Linear arrays are useful when information has an internal linear structure, such as steps in a process or events on a timeline.
- A simple linear array can mark historical events or major parts of a process by using a horizontal or vertical line.
- A hierarchy or tree structure can be used for items that are a part of a group.
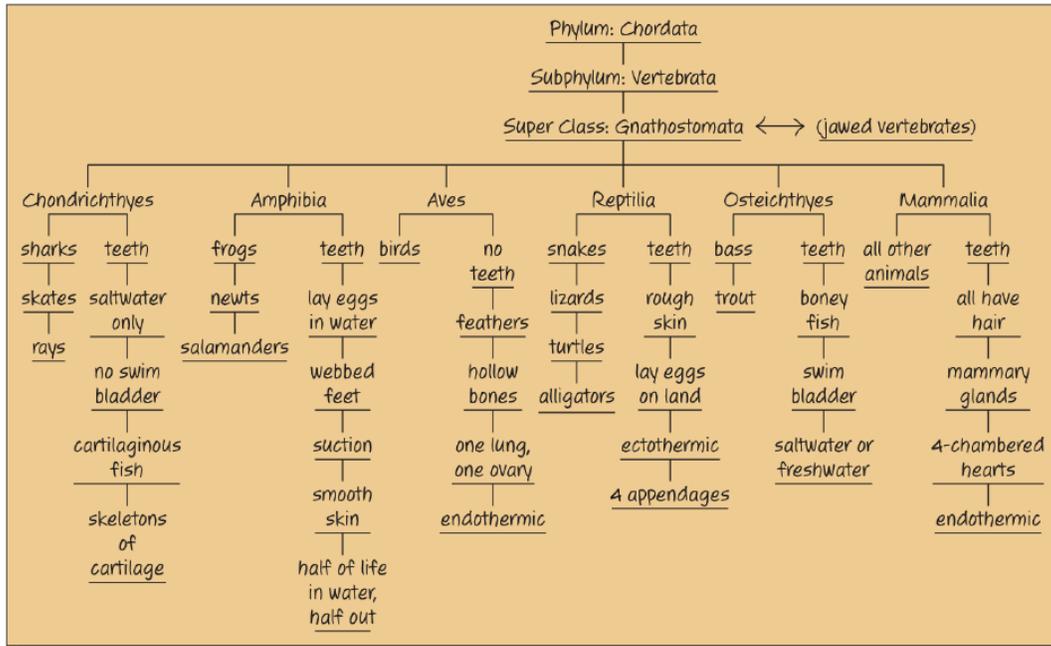- A flow chart shows a progression through a sequence of operations.
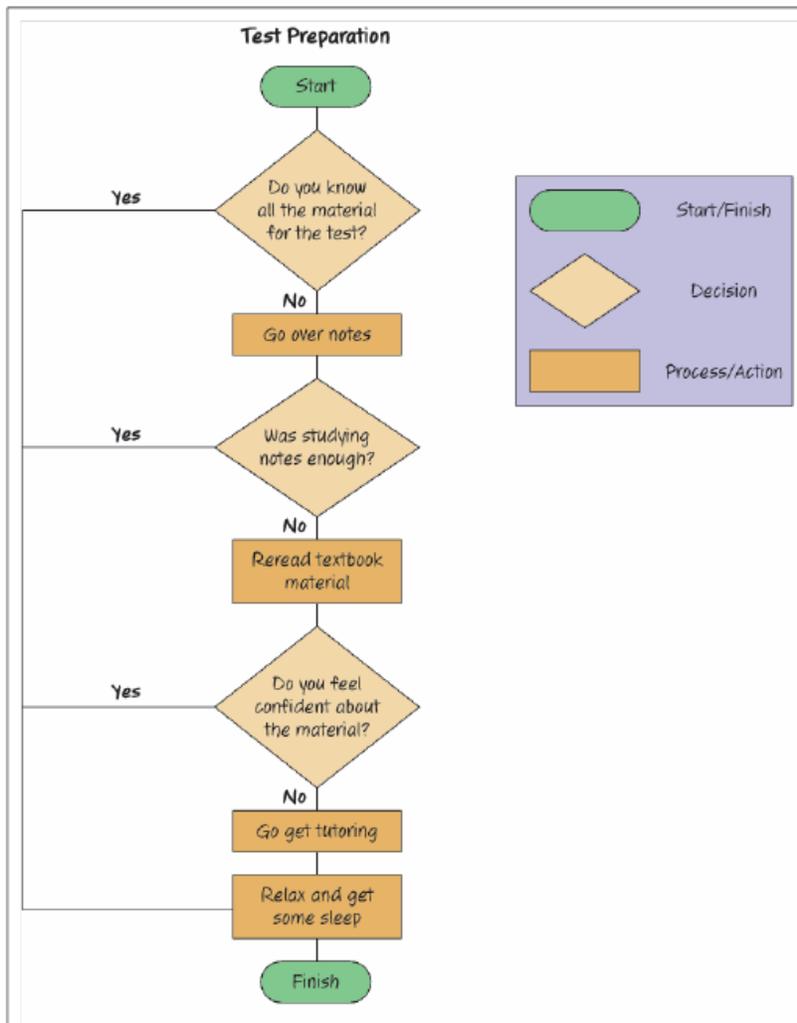
An Example of a Vertical Array

An Example of a Hierarchy

American Revolution Time Line

1761	—	Writs of Assistance
1763	—	Navigation Acts
1764	—	Sugar Act
1765	—	Stamp Act
1765	—	Quartering Act
1765	—	Stamp Act Congress
1766	—	Declaratory Act
1767	—	Townsend Acts
1770	—	Boston Massacre
1772	—	Gaspie Incident
1773	—	Boston Tea Party
1774	—	Intolerable Acts
1775	—	Battle of Lexington & Concord
1775	—	Battle of Bunker Hill
1776	—	Ratification of Declaration of Independence
1776	—	Battle of Trenton
1776	—	Battle of Princeton
1777	—	Battle of Saratoga
1780	—	Battle of Yorktown
1783	—	Treaty of Paris

An Example of a Tree Structure

Phylum: Chordata
Subphylum: Vertebrata
Super Class: Gnathostomata ⟷ (jawed vertebrates)

Chondrichthyes
sharks — teeth
skates — saltwater only
rays
no swim bladder
cartilaginous fish
skeletons of cartilage

Amphibia
frogs — teeth
newts — lay eggs in water
salamanders
webbed feet
suction
smooth skin
half of life in water, half out

Aves
birds — no teeth
feathers
hollow bones
one lung, one ovary
endothermic

Reptilia
snakes — teeth
lizards — rough skin
turtles
alligators — lay eggs on land
ectothermic
4 appendages

Osteichthyes
bass — teeth
trout
boney fish
swim bladder
saltwater or freshwater

Mammalia
all other animals — teeth
all have hair
mammary glands
4-chambered hearts
endothermic

An Example of a Flow Chart

Test Preparation

Start

Do you know all the material for the test? — Yes

No

Go over notes

Was studying notes enough? — Yes

No

Reread textbook material

Do you feel confident about the material? — Yes

No

Go get tutoring

Relax and get some sleep

Finish

Legend:
- Start/Finish
- Decision
- Process/Action

MATRICES

- The purpose of the matrix is to compare topics across several dimensions.
- Filling in cells allows you to condense large amounts of information into one organizer.
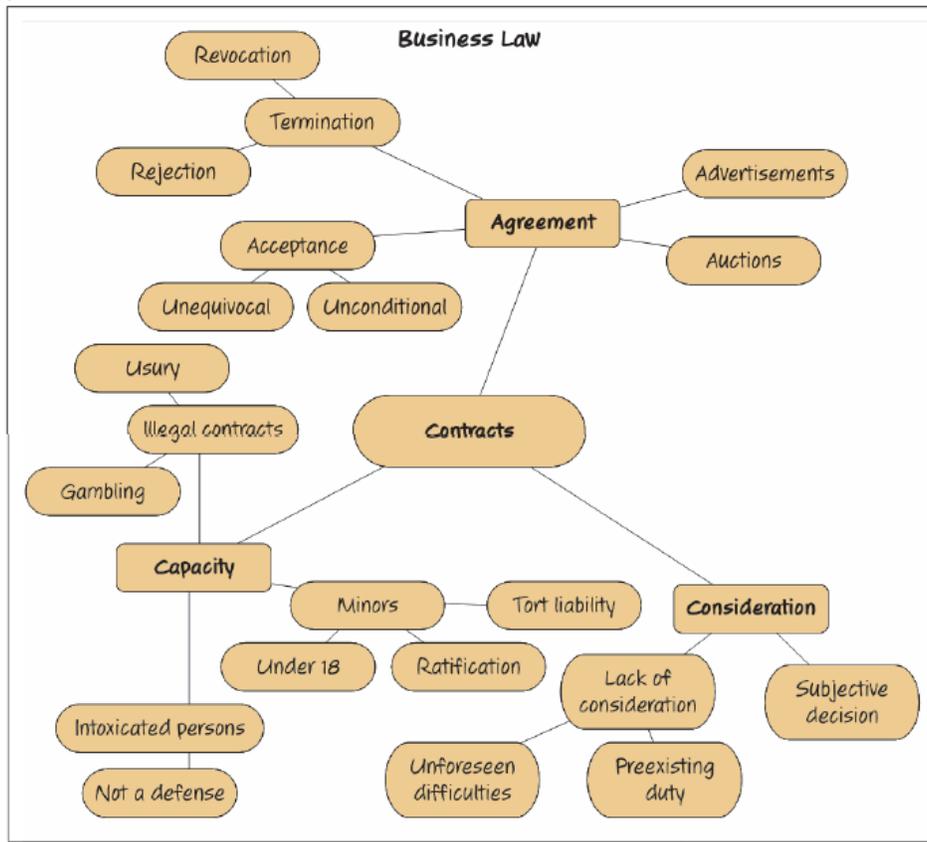- To study, try turning the dimensions into questions and answering them.

Example of a Matrix

Authors	Major Themes of Work(s)	Influences on Works	Poem(s)/Story	Main Idea of Poem(s)/Story	Critics' Comments (of their time)
Sylvia Plath	• Horror • Death	• Father died of cancer when she was 10 • Pushed by mother to do well	1. "Daddy" 2. "Lady Lazarus"	1. Father died of cancer, guilt 2. Celebrating suicide attempts—ref. in both to Holocaust	Poems were "the longest suicide notes ever written"
Walt Whitman	• Sexuality • Ecstatic perception of man and nature	• Natural talent for journalism • Emerson, friend	1. "When I Heard the Learn'd Astronomer" 2. "The Dalliance of the Eagles"	1. Rejection of astronomer's perception of nature 2. Power of sexual drive, celebration of life force	"poetry of barbarism," "mixture of Yankee transcendentalism and NY rowdyism"
Emily Dickinson	• Calvinism = to look inwardly • Coldness of the world • Love, death, nature, immortality, beauty	• Emotional crisis brought on by lost love of a married man • Shakespeare, Keats, the Brownings	1. "I Heard a Fly Buzz—When I Died—" 2. "Because I Could Not Stop for Death—"	1. Disbelief in afterlife/immortality 2. Belief in immortality, death-gracious gentleman caller	"farrago of illiterate and uneducated sentiment"
Nathaniel Hawthorne	• Concern with American past • Human isolation and seclusion	• Life in Salem, Puritanism	"Young Goodman Brown"	Evil is the nature of every human being (abstract meaning)	Wrote with "all the fascination of a genius and all the charm of a highly polished style"
Edgar Allan Poe	• World of perversity, disorder • Fascinated by the bizarre	• Depression • Psychologically crippling childhood • Unsuccessful suicide	"Cask of Amontillado"	Conditions of revenge, death bed confession, obsessed with murder that he got away with	"demonic" "egotistic villain with scarcely any virtue"
Herman Melville	• Confrontation of innocence and evil • World filled with lost innocence and betrayed hope	• Sea life • Adventures while traveling	"Bartleby, the Scrivener"	Bartleby is a greater person than the narrator, who thinks otherwise	A man who could "neither believe nor be comfortable in his disbelief"

MAPS

- Maps are visual attempts to represent relationships among various concepts and data. They can range from simple to elaborate.
- Effective maps often use color.
- Two types of frequently used maps are concept maps and networks.
  - Concept maps allow you to group related information into two- or three-level drawings.
  - Networks are the most complex and the most powerful types of maps. They build on a concept map, but all the links between the items are labeled to identify relationships.

Example of a Concept Map Using the Bubble Format

Business Law

Revocation

Termination

Rejection

Advertisements

Agreement

Acceptance

Auctions

Unequivocal   Unconditional

Usury

Illegal contracts

Contracts

Gambling

Capacity

Minors   Tort liability   Consideration

Under 18   Ratification   Lack of consideration   Subjective decision

Intoxicated persons

Unforeseen difficulties   Preexisting duty
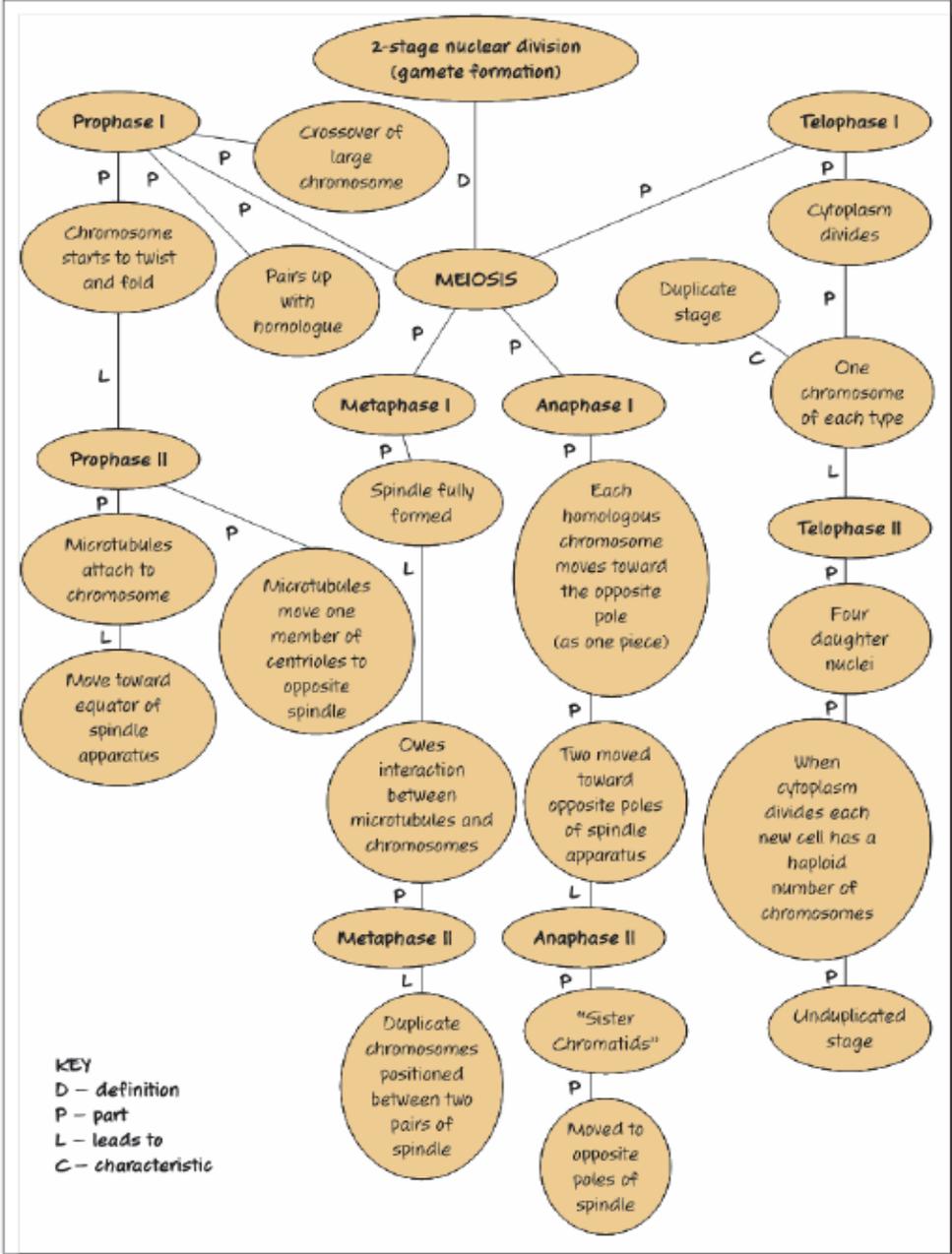
Not a defense

Example of a Concept Map Using the Spider Format

First Pacific Railway Act

Union Pacific built west Central Pacific built east

Morrill Land Grant

granted 300,000 acres for each delegate

Establishing Railway System Plans

40 ft. R.O.W. 5 alternating sq. miles

sales of land went to establish state schools

Land Settlement Plans

Federal Grants

Homestead Act

granted settlers 160 acres of land

provided link from Chicago to Mobile

settlers had to work land for 5 years

3,736,000 miles of R.O.W.

Ordinance of 1785– Pre-19th Century

created 6 x 6 sq. mile townships

sold land plots for $1.00

Planning Movements in the early 19th century

received funds from taxes on new cars, fuel, etc.

Highway Trust Fund

Reclamation Act of 1902

sale of public lands used for water projects

over 19 billion in reserves

Bureau of Reclamation

start of dam construction, ex. Hoover

provided highway uniformity standards

Federal Aid Highway Act

Water Plans in the West

Corps of Engineers

water-related projects

proposed six interstate highways 3-N/S, 3-E/W

Bureau of Public Roads

Interstate Highway System Plans

Urban and Regional Planning

Water Resource Development Act

Example of a Process Network

Note the use of letters between the nodes to indicate relationship and the key for the letters.