Flipperentiating!

http://goo.gl/chMLV

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We're a Middle School.

Many Different Students, Many Different Needs

The problems *

- Some WANT to & can move faster, learn more but...
- No ability to push (or engage) those that are comfortable
- The kids that don't finish in class don't do the HW & don't get the skill reinforcement that they need

* Obviously, these are generalities.

Our Flipping Needed to Be Different

The students needed assistance with their flip.

What we had before:

1. Notes *
2. Short lab or activity

HW: Finish lab/activity (questions) if not done

* MS students need background knowledge.

The goal


Support
Predict
Formulate
Evaluate
The Language of Science
i like you
you're different!
EXIT
The Scientific Method
Hypothesize
Plan Your Experiment
Experiment
Collect and Record Data
Come to a Conclusion
refrigerator door
LISTER

An example: Circulatory System

1. Self-Paced Notes
2. Directed lab: Heart Rates

HW: Skill reinforcement

HW: Self-Paced Notes before class

1. Skill reinforcement
2. Open inquiry lab: Heart Rates

Directed Lab

Data - Results:

Activity	Pulse Rate per Minute
Resting	
Walking	
Running in place	
Jumping Jacks	
Resting after exercise (1 min)	
Resting after exercise (3 min)	

Analyze your data:

Graph Use the data you obtained to create a bar graph of your pulse rate under th
you tested. Be sure to label the X & Y axis with "Activity" and "Heartbeats per
Be sure to include a title.

TITLE

Open Inquiry

Lab: Activity Affects Circulation NAME:
Open Inquiry

Problem Question: How does physical activity affect your heart rate?

Design an Experiment:

1. Imagine you are a physician and your partner is your patient. Your patient is going to have minor surgery soon. You want to prepare your partner for the recovery period by determinin what types of regular activities cause heart rates to go up significantly and then recommendi that he or she avoid those activities.

2. First, determine what your patient's resting heart rate is. To do this, place your index and middle fingers on the patient's wrist, about 2.5 cm below the base of your thumb. You shoul feel a steady pulse. To measure the heart rate, count the number of beats as you watch 15 seconds go by on the stopwatch. Multiply that number by ____ to get the beats per minute (beats/min). Record that figure here:

   Their resting heart rate is = _____

An example: DNA replication

1. Skill reinforcement: DNA
2. Directed Activity: DNA construction lab

HW: None

HW: DNA Replication notes before class

1. Directed activity: DNA construction lab
2. Stop motion movie creation: DNA replication

HW: None

An example: Cold War (SS)

1. Cold War notes via BrainPop w/ FA
2. Intro Cold War project

HW: Begin project planning

HW: Cold War notes (BrainPop) w/ FA

1. Cold War presentation (in-depth)
2. Intro Cold War project
3. Begin project

HW: project planning

An example: Grammar Lesson

Emerging	In-Progress	Proficient
1. Google Form CFA 2. Self-Paced grammar Notes 3. Practice with instructor HW: Skill Reinforcement Practice (continue to FA)	HW: Self-Paced Grammar notes before class 1. G. Form CFA 2. Grammar skill reinforcement activity HW: None	HW: Self-Paced Grammar notes before class 1. G. Form CFA 2. Grammar activity (more application & synthesis) with partner HW: None

An example: Geometry (mid-unit)

Emerging	In-Progress	Proficient
1. CFA (instructional notes, practice) 2. Direct instruction, (re-teach) small group HW: Practice	HW: CFA before class 1. Follow-up activity, working in groups 2-3 HW: None	HW: CFA before class 1. Create a tutorial w/ partner 2. Math puzzles, tanagrams etc. HW: None

Notes - What's important

- Guided notes (not F-I-B)
- Cornell notes
- You may not want simple vocab definitions, but consider low level before high level questions
- Screencasts or pre-made videos aren't your only option, texts can work in a pinch

Guided Notes Example, High to Low

Arteries

Veins

Capillaries

Summary: Explain the similarities and differences between arteries, veins, and capillaries.

Summary:

Respiratory System Notes

Respiration

Respiratory system organs

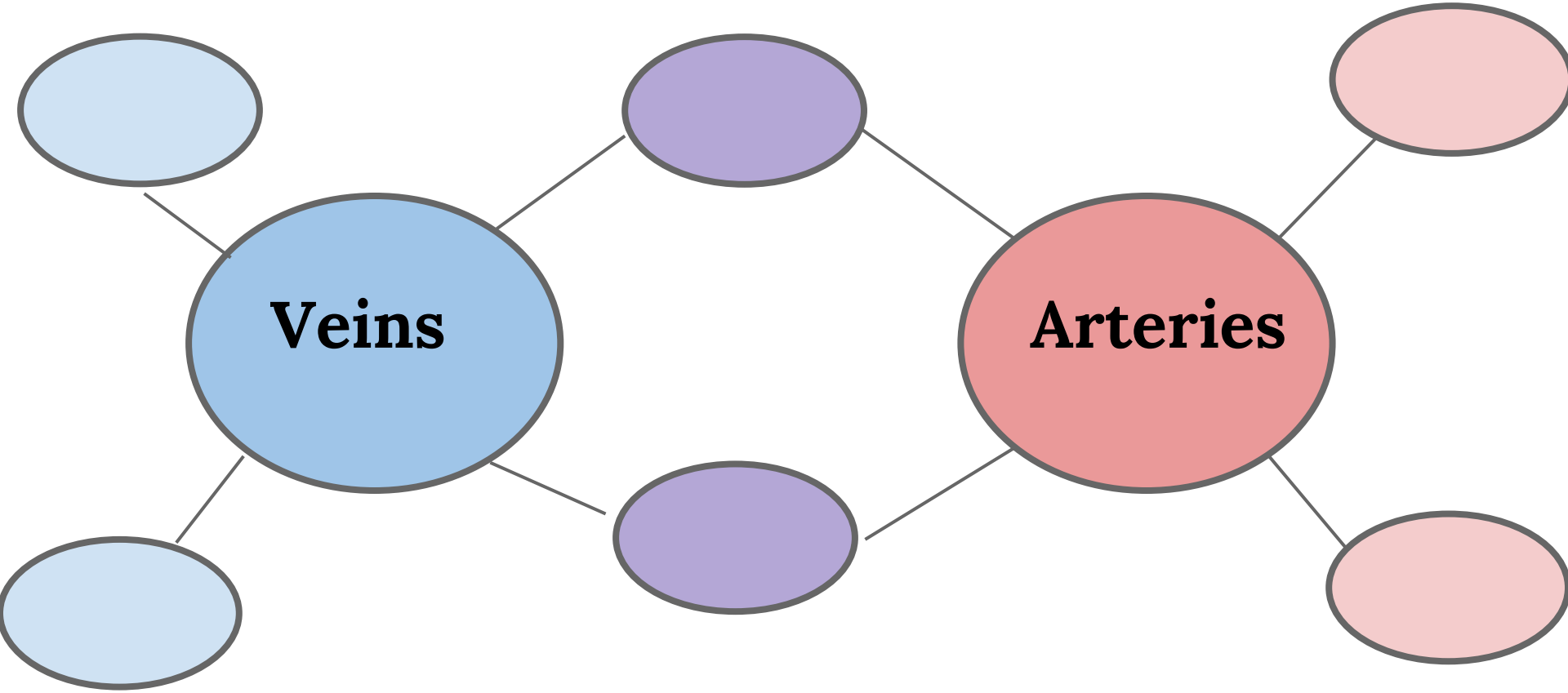
Alveoli

Diaphragm

Air Pathway

Summary or What is the goal of the respiratory system?

Skill Reinforcement Example: DB Map



Skill Reinforcement Example: "Connect To"

Mass

Volume

Distance

kg

cm

mm

Gram

Meter

Liter

Graduated Cylinder

Scale

Beaker

Balance

Ruler

SI Units

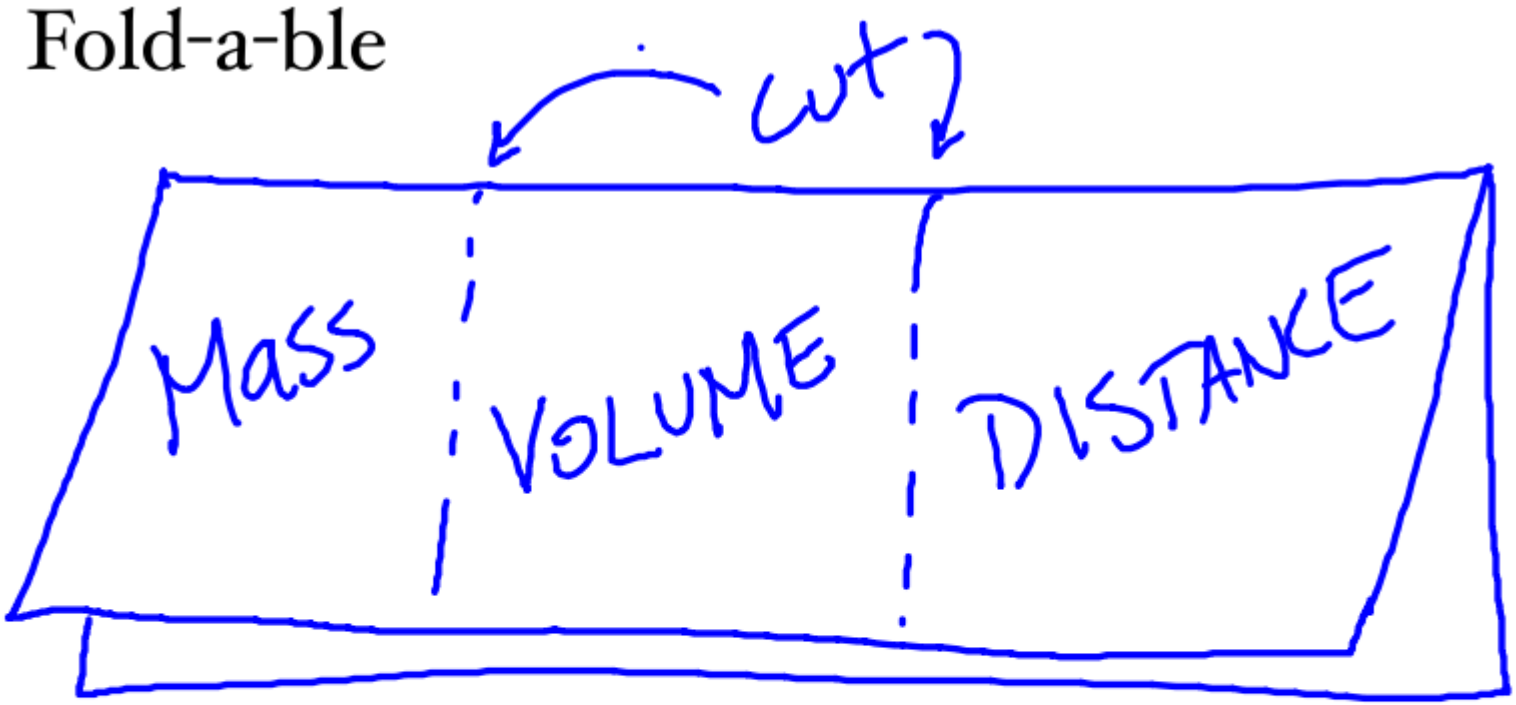
Measurement

Base Unit

Metric Systen

English Standard System

Skill Reinforcement Example: Fold-a-ble

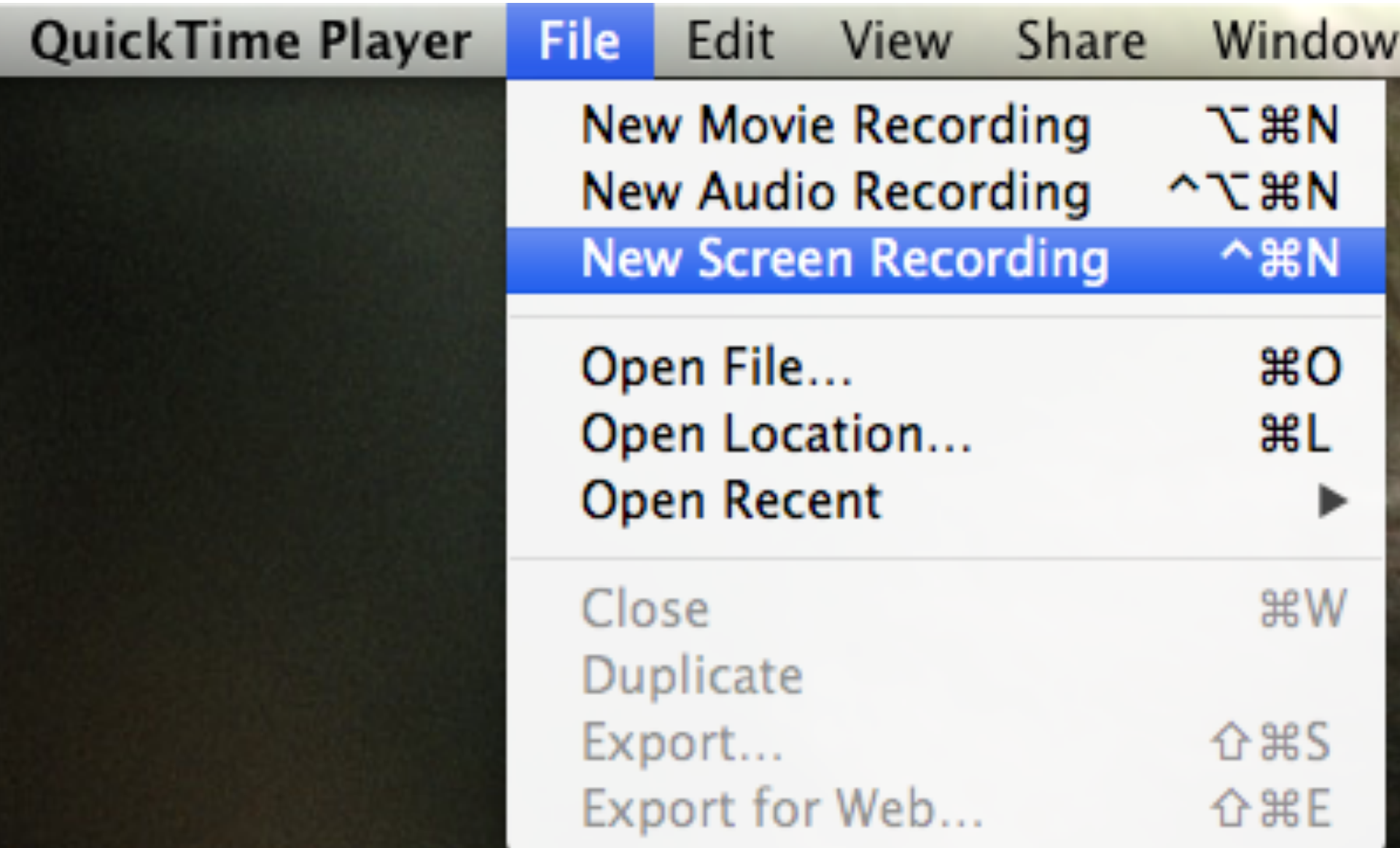


Inside

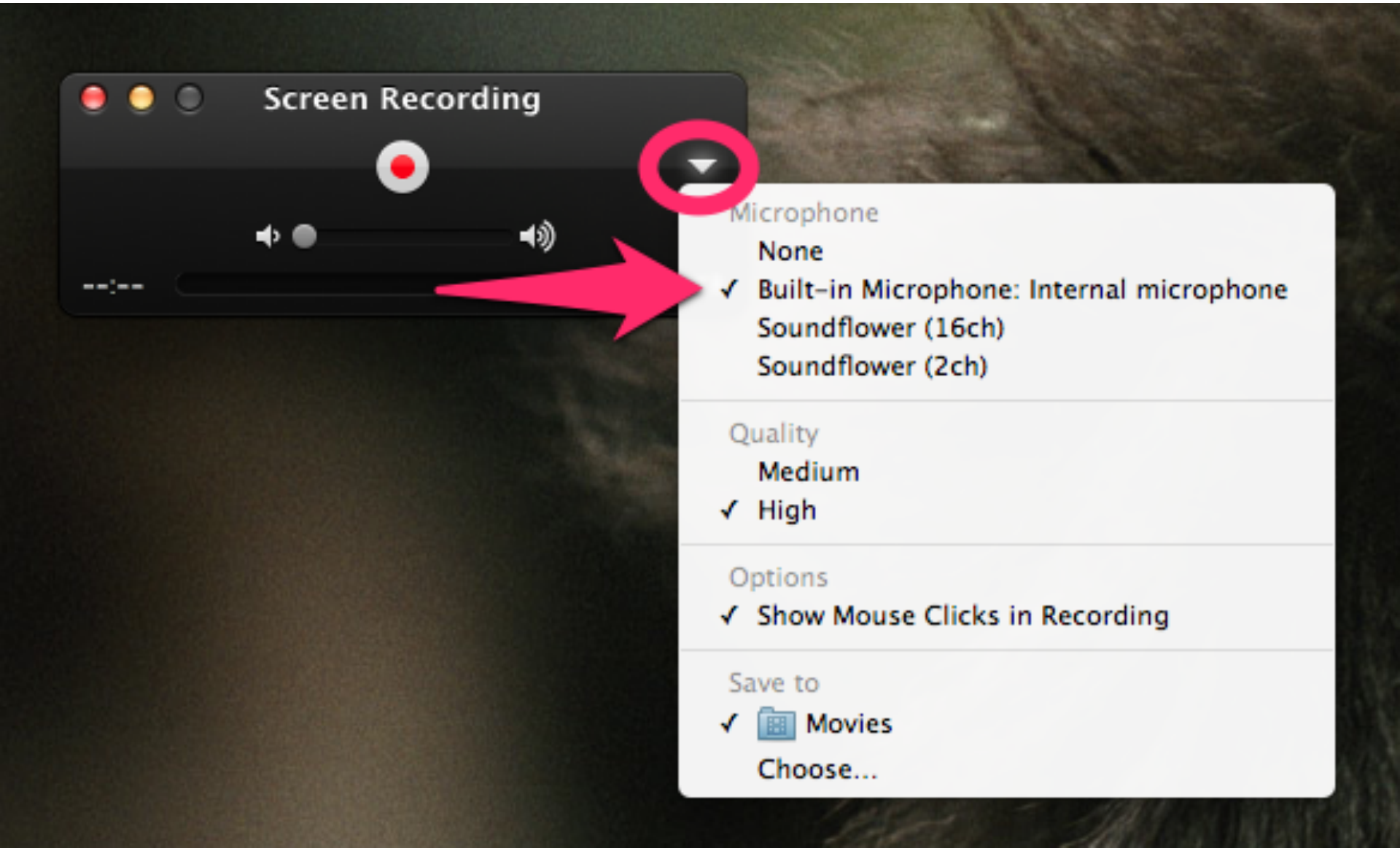
- picture with color
- definition in your own words
- base unit

Record

Record


QuickTime Player
File
Edit
View
Share
Window
New Movie Recording ⌥⌘N
New Audio Recording ^⌥⌘N
New Screen Recording ^⌘N
Open File... ⌘O
Open Location... ⌘L
Open Recent
Close ⌘W
Duplicate
Export... ⇧⌘S
Export for Web... ⇧⌘E

Record


Screen Recording
--:--
Microphone
None
✓ Built-in Microphone: Internal microphone
Soundflower (16ch)
Soundflower (2ch)
Quality
Medium
✓ High
Options
✓ Show Mouse Clicks in Recording
Save to
✓ Movies
Choose...

Edit


Explore

Differentiated Work Time

Screencasting

Marissa

Guided Notes, Video Search, creating a playlist

Becky

Independent work

On your own

Work Time

1. Pick a topic that you teach.
2. Browse YouTube; is there a video that explains your topic? Is there a video that you could use for enrichment?