

# Practice Tips: Picture This



**USEFUL THINGS TO TRY:** Practice with your teacher or at home with a parent.

1. Start simple! This event requires students to draw simple images quickly. The drawings do not need to be great art, but they **do** need to be easy to interpret! Have your students talk about the easiest way to draw the **simple nouns** in the table below using **one** simple picture.

Arm	Mountain	Leaf	Map	Liquid
Skeleton	Earth	Corn	Moon	Ice

2. Go from general to specific by using arrows. Science Olympiad rules prohibit letters or numbers, but they **do allow** arrows, so a picture of an arm easily becomes an elbow by adding an arrow pointing to this joint. The word pairs below are examples – students can easily draw a simple picture for the word on the **left**, and adding an arrow makes it **much** easier to get at the harder word on the **right**. Try it!

Arm → Elbow	Earth → Continent	Light bulb → Filament
Sun → Planet	Earth → Mantle	Hand → Thumb
Tree → Root	Volcano → Lava	Duck → Adaptation
Ant → Thorax	Volcano → Eruption	Tiger → Camouflage

3. Have your students come up with several “container words” that could help them lead their partners towards more complicated ideas – ideas that are abstract and hard to show with a simple picture. Once they guess the “container,” see if adding new features or a second picture gets them to the more abstract concept. Can they agree on a simple symbol for each example “container”?

Container Words	Abstract Concepts related to Container				
Sun	Orbit	Venus	Sunspot	Eclipse	Revolution
Leaf	Sap	Deciduous	Compost	Carbon Dioxide	Photosynthesis
Triangle	Ramp	Perimeter	Geometry	Symmetrical	Equilateral
Brain	Neuron	Theory	Language	Intelligence	Spinal cord
Thermometer	Freeze	Boil	Evaporate	Warm Blooded	Boiling Point

**USEFUL WEBSITES TO SEE:** We verified these in January, 2017.



Example Science Vocabulary Lists:

[http://www.kerrvilleisd.net/departments/curriculum/science\\_vocabulary\\_k-5](http://www.kerrvilleisd.net/departments/curriculum/science_vocabulary_k-5)  
<http://www.albanyschools.org/Academics/Science/Gr4SciTestVocab.pdf>

Concept map ideas:

[http://www2.scholastic.com/content/collateral\\_resources/pdf/r/reading\\_bestpractices\\_vocabulary\\_tr\\_AllConcept.pdf](http://www2.scholastic.com/content/collateral_resources/pdf/r/reading_bestpractices_vocabulary_tr_AllConcept.pdf)

Strategies for teaching science vocabulary:

<http://www.learnnc.org/lp/pages/7079>

### **RULE CLARIFICATION:**

These apply to the 2017 DeKalb Elementary Science Olympiad.

1. With regard to rule #5, we also allow the current “guesser” to verbally pass.

### **RELEASED WORD LIST:**

Samples of words used during 2014–2016 in DeKalb.

Atom

Force

Pollination

Constellation

Friction

Reflection

Evaporation

Heat energy

Wavelength

### **CONCEPT MAPS FOR VOCABULARY GROWTH:**

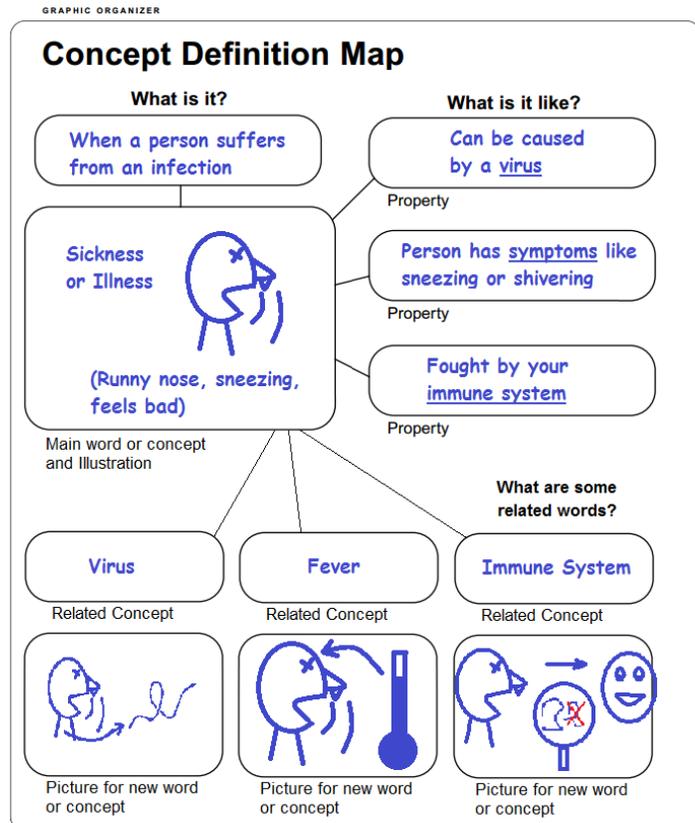
Concept Maps can help students learn new vocabulary and see how new concepts link to simpler ideas. Below is an example of a Concept Map building on the idea of “sickness.” The sick person is pretty easy to draw, then I extended it using the “Container Word” idea from above:

Container Word	Abstract Concepts related to Container
Sickness	Virus Symptom Fever Immune System

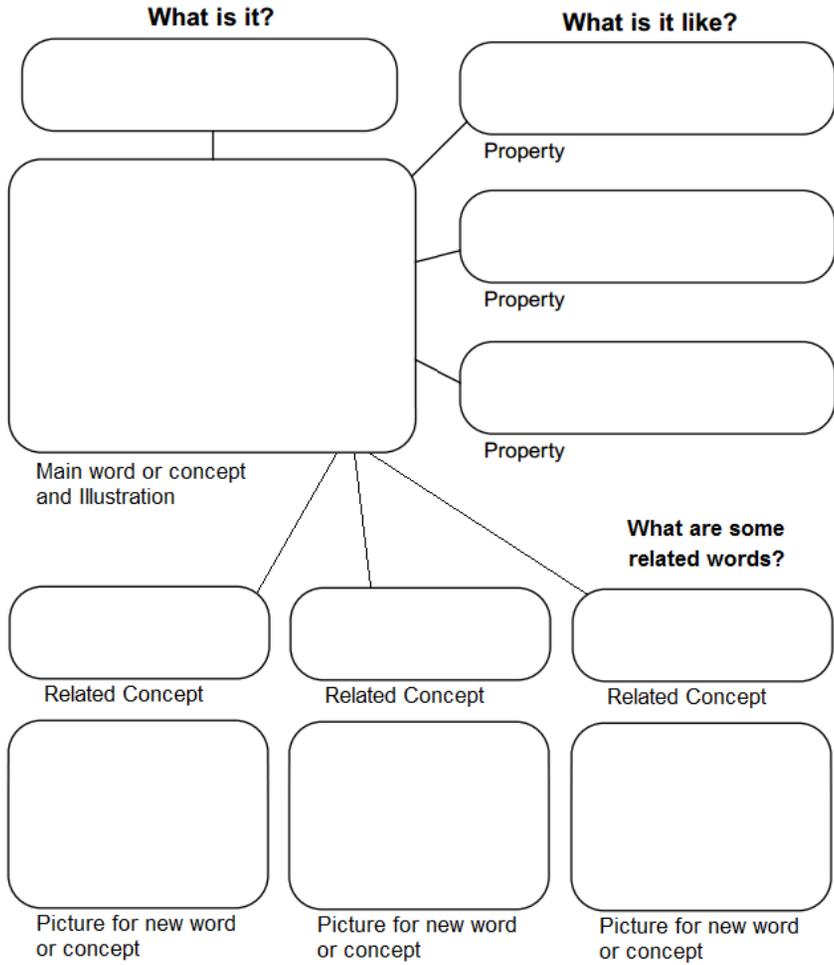
The idea is to find a simple, standard picture that all participants can draw quickly. Build from this simple picture to show harder ideas!

Use the blank sheets on the following page. Think of some good basic words, then have the students come up with the harder concepts that are harder to draw directly.

My last picture for the “Immune System” is supposed to show a magnifying glass that lets you see a white blood cell eating a virus. Not very good? See if your team can do better!



# Concept Definition Map



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