

## Building Academic Vocabulary

Bayfield School District teachers have adopted a system wide approach for teaching academic vocabulary called the six-step process to building academic vocabulary. This method, described in Building Academic Vocabulary (2005) by Robert Marzano and Debra Pickering, is predicated on students learning a common core of critical academic terms across grade levels and content areas. Because students' knowledge is encapsulated in the terms they know, the more academic vocabulary they understand, the easier it is for them to learn and understand *new* content that builds as they move up the ladder.

Between 20-40 academic terms were pre-identified by Bayfield School District teachers for each content area and grade level based upon Colorado content standards. These terms are NOT the only terms that will be taught during a school year (teachers will teach MANY more), but because of their critical importance to building academic knowledge, they are the only ones that will be taught using the six-step process.

Students have folders or notebooks at school in which they keep the vocabulary templates they use as they proceed through the six-step process. Teachers introduce the term or phrase in steps 1 – 3 by asking students to generate their own explanation, description, and/or example, and then ask students to represent the term graphically. Terms are sharpened in steps 4-6 by students comparing their understanding to classmates' and teachers using activities and games to engage students in different modalities of learning to keep terms active in working memory, and as they are deepened, committed to permanent memory.

Ask your student(s) about their vocabulary templates and notebooks and familiarize yourselves with the words your children are learning on each of the school's web sites. Teachers and students will be glad you did!

### Grade 9-12 Earth Science

big bang theory  
stellar magnitude  
stellar mass  
main sequence  
stellar evolution  
Hertzsprung-Russell diagram  
fusion  
nebular theory  
asteroid  
comet  
meteoroid  
paleontology  
relative age  
unconformity  
radioactive decay  
geologic time  
Doppler effect  
spectroscopy  
electromagnetic spectrum  
galaxies  
constellation  
heliocentric  
Kepler's Laws  
terrestrial planets  
gaseous planets  
tides  
eclipse  
lunar phases  
mineral  
rock cycle  
crystal formation

### **Grade 9-12 Physical Science**

chemical bonding  
polarity of water  
pH  
eukaryotic  
biomolecules  
enzymes  
active transport  
passive transport  
prokaryotic  
specialization  
differentiation  
photosynthesis  
aerobic respiration  
anaerobic respiration  
mitosis  
meiosis  
allele  
homologous chromosome  
double helix  
replication  
transcription  
translation

### **Chemistry**

compound  
mixture  
molecule  
valence electron  
ion  
ionic bond  
covalent bond  
velocity  
acceleration  
friction  
inertia  
momentum  
period  
refraction  
interference  
periodic law  
mole  
heat  
frequency  
current  
resistance  
chemical formula  
physical property  
chemical property  
energy  
isotope  
chemical equation  
radioactivity  
work  
power

### **Grade 9-12 Ceramics**

cone  
slip

score  
bisqueware  
greenware  
glaze ware  
elastic stage  
leatherhard stage  
brittle stage  
wheel throwing  
hand building  
centering  
kneading  
functional  
sculpture  
relief sculpture  
form  
trimming a foot

### **Grade 9-12 Photography**

negative  
film  
camera  
develop  
shutter  
aperture  
developer  
stop bath  
fixing bath  
print  
composition  
focus  
exposure  
light sensitive paper  
enlarger  
enlargement  
worm's eye view  
bird's eye view  
point of view  
foreshortening  
depth of field  
filter  
optical illusion  
chemical burns  
print  
contrast  
unity  
light source  
back lighting  
monochromatic

### **Grade 9-12 Woodworking**

carcass  
dado  
grooves  
rabbets  
stock  
outfeed  
face planing  
joinery  
miter joints

miter cuts  
fasteners  
push stick  
jig  
counter sink  
counter bore  
pre-drilling  
clamping  
router  
install  
lamine stock  
species  
hardwood  
softwood  
grade  
nominal size  
treated  
dowels  
dowel joints  
gluing  
frame  
frame construction  
face frames  
doors  
squaring up  
safety  
planning process  
budget  
storing  
moisture content  
design

### **Grade 9-12 Catering**

sanitary operations  
thermometers  
menu layouts  
cost control  
sauteing  
pan frying  
deep frying  
braising  
stewing  
poaching  
steaming  
baking  
cooling  
reheating  
holding foods  
plating  
garnishing  
food presentation  
time managing  
oral presentation  
teamwork  
diversity  
ethnic foods  
service skills  
customer complaints  
careers

employability  
TAAT (Taste, Analyze, Adjust, Taste)  
reception setups  
catering setups

### **Grade 9-12 Food Science**

nutrition  
sanitation  
kitchen safety  
food pyramid  
cross-contamination  
salmonella  
e-coli  
botulism  
bulimia nervosa  
food labels  
metabolism  
electrolytes  
vegetarians  
meal planning  
portion control  
enzymatic browning  
carbohydrates  
fats  
vitamins  
calories  
minerals  
kitchen math  
food record  
coagulate  
texture  
fat grams  
gluten  
chalazae  
anorexia nervosa  
homogenized  
pasteurized  
marbling

### **Grade 9-12 Business Basics**

College in Colorado  
goal  
interest  
skill  
resume  
cover letter  
reference  
networking  
interview  
body language  
gross wage  
tax withholding  
W-9  
W-2  
1040  
checks  
deposits  
check register  
bank statement

reconciliation  
disbursement  
invoice  
accounts payable  
accounts receivable  
accrued  
interest  
credit card  
debit card  
legible  
proofread  
organize  
prioritize  
timely  
ergonomic  
business communications

### **Grade 9-12 Drafting**

drafter  
engineer  
architects  
drafting machine  
scales  
irregular curves  
alphabet of lines  
boarders  
title block  
orthographic projection  
three-view drawings  
hidden lines  
extension lines  
leaders  
construction lines  
center lines  
plane  
cylinders  
arches  
dimension  
units  
metric  
customary  
parallel  
coincident  
merge  
vertical lines  
future  
3d

### **Grade 9-12 Drafting**

working drawings  
foundation plan  
site plat  
floor plan  
elevations  
electrical  
wall layout  
code  
rough opening  
dimension

scale  
details  
one-story  
one-half story  
two story  
symbols  
layers  
bill of materials  
section view  
blocks  
overlay  
siding  
trim  
landscaping  
notes  
footprint layout  
sq. footage  
paper size  
plot

### **Grade 9-12 Children's Issues**

physical development  
intellectual development  
emotional development  
social development  
moral development  
value of play  
brain development  
self image  
socializing  
physical needs  
health  
safety  
diversity  
neurons  
heredity  
depth perception

### **Grade 9-12 Fashion Design**

color scheme  
design  
shape  
texture  
pattern  
proportion  
symmetrical  
asymmetrical  
constructing  
manufacturing  
altering  
textiles  
fibers  
woven fabrics  
knit fabrics  
fabric finishes  
bobbin  
parallel  
grain

### **Grade 9-12 Take Charge**

percentage  
fractions  
addition  
subtraction  
reconcile  
scale  
income  
credit rating  
taxes  
deposits  
paycheck  
debit  
credit  
goal setting

### **Grade 9-12 Housing and Interior Design**

charrette  
design board  
architectural lettering  
lifestyle  
ecology  
historical  
cultural  
societal  
bubble diagram  
universal design  
economic  
environmental  
region  
community  
neighborhood  
multifamily  
single-family  
written lease  
mortgage  
condominium  
traditional  
modern  
contemporary  
energy efficient  
elements of design  
line  
form  
space  
mass  
texture  
principles of design  
proportion/scale  
balance  
emphasis  
rhythm  
color harmony  
textile fibers  
secure home

### **Algebra 1**

constant  
expression

evaluate  
factor (noun)  
function  
simplify  
solution  
term  
equation  
solve  
ratio  
domain  
intercepts  
range  
slope  
coefficient  
factor (verb)  
polynomial

### **Geometry**

linear pair of angles  
perimeter  
vertical angles  
alternate exterior angles  
alternate interior angles  
corresponding angles  
transversal  
proof  
regular polygon  
special quadrilaterals  
central angle  
inscribed angle  
transformations  
area  
volume  
similarity

### **Algebra 2**

function  
solutions  
curve fitting  
intercepts  
systems  
matrix  
unit analysis  
complex number  
asymptote  
factor  
roots  
radicals  
inverse  
logarithms

### **Grade 9-12 Teacher Cadet**

physical  
cognitive  
moral social  
barrier  
diverse learner  
observation  
philosophy of education

ethical  
cultural diversity  
privatization  
school board  
board of education  
sexual harassment  
legal rights  
curriculum  
assessment  
collaboration  
qualitative  
quantitative  
team teaching  
standards- based  
lesson plans  
classroom management  
environment

### **Grade 9 Language Arts**

analogy  
external/internal conflict  
MLA  
primary source  
secondary source  
emotional appeal  
rhetorical appeal  
rhetorical strategy  
rhetorical device  
figurative language  
bias  
compare/contrast  
point of view  
parallelism  
allusion  
relevance  
credibility  
soliloquy  
audience  
expository  
descriptive  
dynamic character  
static character  
formality  
genre  
ideology  
tone  
comma splices  
conjunctive adverbs  
independent clause

### **Grade 10 Language Arts**

clarity of purpose  
compound/complex sentence  
propaganda  
cause and effect  
connotation/denotation  
rhetoric  
ethical appeal  
universal themes

cultural perspectives  
historical perspectives  
text analysis  
nuance identification  
hyperbole  
satire  
author's style  
literary influences  
historical influences  
author's intent  
informational manuscripts  
counter argument  
text-based evidence  
euphemism  
inference  
verbal irony  
dramatic irony  
situational irony

### **Grade 11 Language Arts**

allegory  
American literature  
belief system  
censorship  
conceptual map  
ethics  
literary criticism  
rhetorical question  
stream of consciousness  
logical appeal  
graphical representation  
precise diction  
diverse syntax  
interpretation  
justification  
technical reading  
direct observation  
empathy  
metonymy  
gothic tale  
myth  
trickster tale

### **Grade 12 Language Arts Vocabulary list**

archetype  
ballad  
British literature  
Homeric Greek literature  
mythology  
Homeric hero  
Homeric simile  
medieval literature  
epic  
lyric poem  
ode  
author's purpose  
logical argument  
inductive reasoning  
deductive reasoning

denouement  
epiphany  
hubris  
arête  
anachronism  
iambic pentameter  
pathos  
tragedy

### **Spanish 1, Mid and High**

spain  
central america  
south america  
país  
traducir  
verbo  
adjetivo  
adjective agreement  
pronombre  
verb ending  
preposición  
sustantivo  
género  
¿qué?  
¿quién?  
¿dónde?  
¿cómo?  
¿cuándo?  
¿cuánto?  
¿cuántos?  
¿por qué?  
día de los muertos  
cinco de mayo  
september 16th

### **Spanish 2**

emociones  
descripciones personales  
imperfecto  
pretérito  
viajes  
españa  
adverbios (mente)  
familia  
conjugate  
word stem  
word endings  
infinitive  
-ando/-iendo  
dias  
canciones  
videos  
meses  
estaciones  
saludos  
despididas

### **Spanish 3**

artículo

título  
capítulo  
página  
adverbio  
cultura  
pregunta  
respuesta  
conjugación  
corregir  
punto  
marca de pregunta/exclamación  
accento  
la tilde  
la crema  
presente  
pasado  
futuro  
subjuntivo  
mayúscula  
minúscula