BEARCAT DAY

14 & 15

GRADE 8

ANDERSON COUNTY SCHOOLS

ANDERSON COUNTY MIDDLE SCHOOL

8TH GRADE BEARCAT DAY 14

LANGUAGE ARTS	**Lincoln 1st Inaugural Speech Part III** Read the notes from day 12 about Lincoln's 1st inaugural speech. Answer the multiple choice questions and the short answer question.
MATH	**SIMPLIFYING EXPRESSIONS** Students will need to use the notes and examples on the note sheet to help them complete the practice problems on the homework sheet. The homework sheet will need to be returned to the school and turned in for a grade.
SCIENCE	**Bearcat Day 14: Radioactive Dating/Radiometric Dating Review & Math** Read the passage "Radioactive Dating." Use the information from the passage to complete the assignment in their science class' google classroom. If students are not able to access google classroom this worksheet is included in the packet picked up at school.
SOCIAL STUDIES	**HONEST ABE COMES INTO VIEW** Read the notes about Abe Lincoln. Answer the question on the last slide. Submit in Google Classroom or take a picture and email it to your teacher.
PE/HEALTH	**DRUG USE** Read through the slides/notes and answer the questions on your paper based on the material in the notes.
CAREERS	**RESUME (CATEGORIES)** Read the notes and complete the questions.

8TH GRADE BEARCAT DAY 15

BEARCAT DAY 15 will be a buffer day. Buffer days are days that are regularly scheduled throughout the school year for kids to reflect on their learning and ask questions. There will not be a seperate "packet" for day 15. Please encourage your child to use this day to get caught up and seek help from his/her teacher if needed.

BEARCAT DAY 15 REFLECTION	
What is something that you did well this week?	What questions do you have from this week's work?

Lincoln's First Inaugural Address Part III

* Required

1. Email address *

2. Name and Class Period (Please capitalize where necessary.) *

3. 1. To whom does the pronoun "you" refer in these paragraphs? * 5 points

Mark only one oval.

- Abraham Lincoln
- Congress
- Fellow Countrymen
- Enemies of the United States

4. 2. What is the effect of the use of these pronouns? * 5 points

Mark only one oval.

- Lincoln is showing us Congress is making wrong decisions.
- France and Britain are trying to interfere with US government.
- Lincoln is showing us we are responsible for the consequences of our decisions.
- Lincoln will make the final decision on whether or not to go to war.

5. 3. Paraphrase (put in your own words) the last sentence of this speech. * 10 points

6. 4. Which of the following does Lincoln seem to have been attempting to do in this speech? * 5 points

Mark only one oval.

- Reassure
- Frighten
- Comfort
- Warn

Lincoln's First Inauguration Speech SA EC

* Required

1. Email address *

2. USING RACE-Looking back at your answer on #4 of the multiple choice (reassure, frighten, comfort, warn), justify your answer. Don't forget to use textual evidence to support your word. *

Grade 8 Bearcat Day 14 Math

Unit: Linear Equations
Student Handout 1

Name Answer Key

Date _____ Pd _____

SIMPLIFYING EXPRESSIONS

EXPRESSIONS	• An expression is a mathematical phrase that can contain numbers, variables and operators (like addition and subtraction). • An expression will not have an equal sign. • An example of an expression would be: 8x + 1
TERMS	• A term is a constant or a variable in an expression. • Terms are separated by + and − signs. • Ex: List all of the terms in the expression 6x − 10y + 13 + 5z 6x, 10y, 13, 5z
COEFFICIENT	• The number in front of a variable in a term. • Ex: Circle all of the coefficients in the expression (14)x + (7)x + 10 + (2)x
LIKE TERMS	• In order for terms to be like terms, they must have both the same base (or variable) and the same exponent (or power).

Label the following terms as "like" or "unlike".

TERMS	LIKE OR UNLIKE?
-15x and -15	Unlike
$\frac{1}{4}c$ and $-9c$	Like
$2.5x^2$ and $3.5x^2$	Like
6y and 6x	Unlike
30 and -25	Like
17b and $\frac{1}{17}b$	Like
10m and $10m^2$	Unlike
2.2n and 2.2	Unlike

Give an example of a like term for each term in the table:

TERM	LIKE TERM
14y	9y
-9x	12x
$15b^2$	b^2
55	-100
-23xy	2xy
-h	-19h
$2m^3$	$-m^3$
200	1

Grade 8 Bearcat Day 14 Math

p 2 of 2

Unit: Linear Equations
Homework 1

Name _____

Date _____ Pd _____

SIMPLIFYING EXPRESSIONS

Match each expression with the correct simplified expression. Use the corresponding letter with each solution to help you solve the riddle.

❶ $4x - 2x - 20x + x$	❷ $-\frac{4}{7} + \frac{2}{7}x - 14x + \frac{4}{7}$
❸ $7 - 9x - 15 + 12x$	❹ $-2.4x + 3.8x - x$
❺ $-.8x + 40 - 8x - 35$	❻ $12\frac{5}{6}x - 14x + \frac{1}{6}x$
❼ $-3x + 14 - 11 + 11x$	❽ $3.75x - 5 - 8.75x + 4.5 + 0.5$

A $-5x$	E $-8.8x + 5$	O $3x - 8$	L $0.4x$	G $-x$	W $8x + 3$
R $-17x$	B $-13\frac{5}{7}x$	M $-8x$	U $-2\frac{1}{6}x$	D $-13\frac{1}{7}x$	N $-5.5x$

WHAT IS A BIRD'S FAVORITE SUBJECT?

___	___	___	___	___	___	___	___
3	7	4	6	5	2	1	8

Name Grade 8 Bearcat Day 14 science Class _____

p1of4

Radioactive Dating of Rocks

Key Concepts

- What happens during radioactive decay?
- What can be learned from radioactive dating?

Rocks are a form of matter. All the matter you see, including rocks, is made of tiny particles called **atoms.** When all the atoms of a particular type of matter are the same, the matter is an **element.** Most elements are stable. They do not change under normal conditions. But some elements exist in forms that are unstable. Over time, these elements break down, or decay, by releasing particles and energy in a process called **radioactive decay.** These unstable elements are said to be radioactive. **During radioactive decay, the atoms of one element break down to form atoms of another element.**

Radioactive elements occur naturally in igneous rocks. For an igneous rock, its "birthday" is when it first hardens to become rock. As a radioactive element within the igneous rock decays, it changes into another element. Therefore, the composition of the rock changes slowly over time. The amount of the radioactive element decreases. But the amount of the new element increases. The rate of decay of each radioactive element is constant—it never changes. This rate of decay is the element's half-life. The **half-life** of a radioactive element is the time it takes for half of the radioactive atoms to decay.

Geologists use radioactive dating to determine the absolute ages of rocks. In radioactive dating, scientists first determine the amount of a radioactive element in a rock. Then they compare that amount with the amount of the stable element into which the radioactive element decays. Scientists often use potassium-40 to date rocks. This form of potassium decays to form the stable element argon-40 and has a half-life of 1.3 billion years. The long half-life of potassium-40 makes it useful in dating the most ancient rocks.

All plants and animals contain some carbon-14, a radioactive form of carbon. Carbon-14 is useful in dating materials from plants and animals that lived as far back as 50,000 years ago. Because carbon-14 has a half-life of only 5,730 years, it can't be used to date more ancient fossils or rocks.

Radioactive dating works well for dating igneous rocks. Rock particles in sedimentary rocks are from other rocks, all of different ages. Radioactive dating would provide the ages of particles, not the sedimentary rock as a whole. But radioactive dating can be used to determine absolute dates of extrusions and intrusions near sedimentary rock layers. Sedimentary rock above an igneous intrusion must be younger than that intrusion.

Grade 8 Bearcat Day 14 science

Calculating Half-Life Problems

Name_____ Block_____

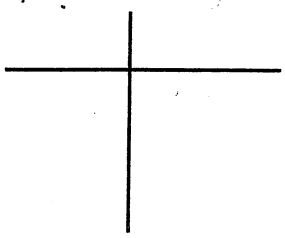
How to Calculate Half-Life Problems:

THE PROBLEM:

An isotope of cesium (cesium-137) has a half-life of 30 years. If 1.0 g of cesium-137 disintegrates over a period of 90 years, how many grams of cesium-137 would remain?

THE SOLUTION:

1. Draw a T-Table:



2. Label the left side with the unit of time mentioned in the problem.

TIME (yrs)	

3. Label the right side with the mass mentioned in the problem.

TIME (yrs)	MASS (g)

4. Begin by always writing a zero in the **TIME COLUMN**.

TIME (yrs)	MASS (g)
0	

5. Then, in the **TIME COLUMN** add one half-life at a time till you reach the total time given in the problem.

TIME (yrs)	MASS (g)
0	
30	
60	
90	

6. In the **MASS COLUMN**, always start with the mass originally given in the problem.

TIME (yrs)	MASS (g)
0	1.0
30	
60	
90	

7. Then keep dividing the number in the **MASS COLUMN** by 2 for each number of half-lives on the left column.

TIME (yrs)	MASS (g)
0	1.0
30	.50
60	.25
90	.125

8. <u>The rules are:</u>
   a. Add half-lives on the left.
   b. Divide by 2 on the right.

Add Half-Life	Divide by 2

9. How many times you added a half-life in the **TIME COLUMN** equals how many half-lives have occurred.

10. The last amount of mass at the bottom of the **MASS COLUMN** equals how much mass is left after radioactive decay has occurred.

Bearcat Day 14: Radioactive Dating/Radiometric Dating

CALCULATING HALF-LIVES

Directions: You learned yesterday and today about the half lives of isotopes and how we can use them to determine an approximate age for rock layers--and therefore fossils found in/around those rock layers. Today, you will be completing some problems using half lives. Use the notes given.

1. An isotope of cesium (cesium-137) has a half-life of 30 years. If 1.0 g of cesium-137 disintegrates over a period of 90 years, how many grams of cesium-137 would remain? Answer: _____	Solve: Time (yrs) Mass (g) 0
2. Actinium-226 has a half-life of 29 hours. If 100 mg of actinium-226 disintegrates over a period of 58 hours, how many mg of actinium-226 will remain? Answer: _____	Solve: Time (hrs) Mass (mg) 0
3. The half-life of isotope X is 2.0 years. How many years would it take for a 4.0 mg sample of X to decay and have only 0.50 mg of it remain? Answer: _____	Solve: Time (yrs) Mass (mg)

4. Plutonium-238 has a half life of 86 years. If you had a 100 gram sample of plutonium, how much would you expect to remain in 86 years?

Work:

Answer: _____

5. Einsteinium-253 has a half life of 20 days. If you had a 100 gram sample of Einsteinium, how much would you have left after 40 days?

Work:

Answer: _____

Bearcat #14

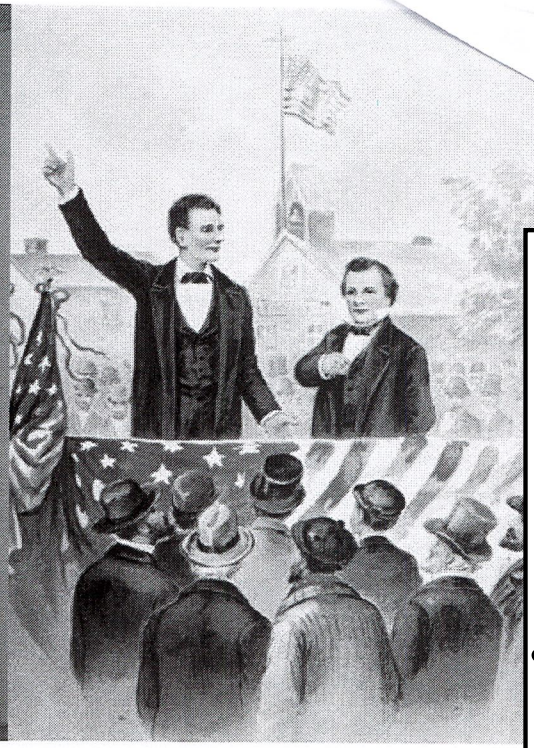
Honest Abe Comes Into View

- The rise of Abraham Lincoln coincided with the collapse of the Union
- Ultimately, his election as president in 1860 led to the secession of the South

Lincoln – Douglas Debates

In 1858, Abraham Lincoln challenged incumbent Stephen Douglas for his seat in the Senate.

(***Incumbent*** – the holder of an office or position)



Abraham Lincoln (left) and Stephen Douglas (right)

Grade 8 Bearcat Day 14 social studies

Lincoln – Douglas Debates

Stephen Douglas:

• Lincoln was wrong for wanting to end slavery.

• If Lincoln tried to end slavery, the U.S. could face a civil war.

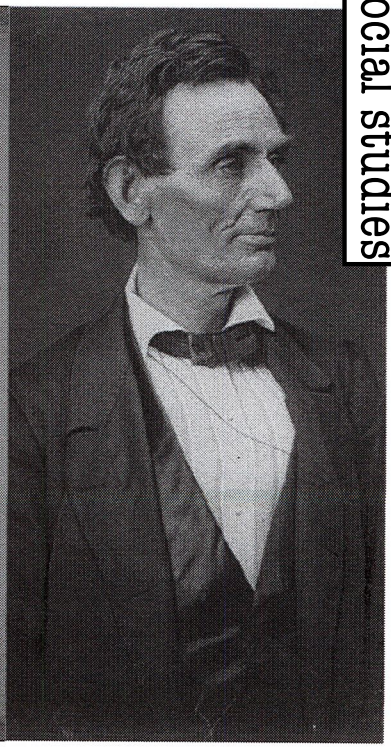
• Douglas believed that each territory should be able to decide on its own whether or not to allow slavery by using popular sovereignty.

Lincoln – Douglas Debates

Abraham Lincoln:

• Lincoln believed that slavery was evil and should be kept out of the territories.

• Lincoln believed that blacks were guaranteed "life, liberty, and the pursuit of happiness," as stated in the Declaration of Independence.



Lincoln – Douglas Debates

Results:

- Douglas won the election by a slim margin.
- However, Lincoln became well known throughout the nation.
- Lincoln would go on to run for president 2 years later

Bearcat Day 14
Answer in complete sentences

1. Why were Lincoln and Douglas debating?
2. Explain the opinions of each man.
3. What was the impact of the debates?

Grade 8 Bearcat Day 14 social studies

Common Reasons for Drug Use

- ➔ Peer Pressure- conformity, it's fun/everyone is doing it
- ➔ Experiment- curiosity, it's available/family members do it
- ➔ Boredom
- ➔ Forget problems- Escape
- ➔ Rebellion

Reasons People Use Drugs

- ❑ People often think drugs are a solution. But eventually, the drugs become the problem.
- ❑ The consequences of drug use are always worse than the problem one is trying to solve with them.
- ❑ The real solution is to get the facts and not to take drugs in the first place.

Effects of Drugs on the Body and Mind

- Drugs often impair a person's ability to think clearly and make reasonable decision.
- Drugs can distort the users perception of what is happening around him or her. As a result, the person's actions may be odd, irrational, inappropriate, and even destructive.
- Many drugs alter both desired sensations and unwanted ones; either enhancing them or blocking them off. While some drugs can provide short-term relief of pain, they can also wipe out alertness and cloud one's judgement.

Drugs can affect different areas of your life

Health

Relationships

Work

Personality

Actions

How would you ans your parents' or guardians' relationship change if they knew you began experimenting with drugs?

Answer on your own paper or on your google doc.

Review Questions

01. Taking drugs can affect many different areas of your life such as school, work, health and relationships.
    a. True
    b. False

02. Which of the following is NOT a reason many teens start using drugs?

    a. Peer pressure
    b. Boredom
    c. To forget about problems
    d. All of the above answers are reasons teens begin using drugs

What goes on a resume?

Categories

1

What else goes on your resume?

- Between the contact info at the top and the references at the bottom is where you list all the GOOD things you want to tell about yourself. These are organized in categories.
- These should be things that an EMPLOYER would want to know. (They do not care that you just got the most adorable baby kitten or that you have grown three inches.)

2

Things to include.

- The categories you include may not be the same as your friend, sibling, or parent. (Remember Day 11 lesson?)
- You may want to tell them about the award you won, your great GPA, the club you're a member of, or your skills and strengths. What you include depends on what GOOD things you want to share. If you do not feel your GPA is good then don't put it. (*Remember, you're trying to impress them with this one piece of paper.)
- Categories you can include (but don't have to) are: EDUCATION, WORK EXPERIENCE, EXTRA-CURRICULAR ACTIVITIES, HONORS/AWARDS, SKILLS/ STRENGTHS

3

Let's look what goes in each category (part 1)

- <u>EDUCATION</u> - school name w/ city & state, special classes you've taken, GPA, expected graduation date (*If you include education, you only HAVE to include school, city & state*)
  - Ex. Anderson County Middle School, Lawrenceburg, KY
    GPA: 3.8
    Expected graduation date: May 2024
- <u>WORK EXPERIENCE</u> - (this can be paid or not paid) include your job title, job duties, time you worked there, and possibly the name of where you worked (if it's a business)
  - Ex. Babysitter
    2018 - 2020 (summers only)
    Supervised children, cooked lunches, organized games

4

Let's look what goes in each category (part 2)

- EXTRA-CURRICULAR ACTIVITIES - (anything you do outside of class such as clubs, sports, etc.) include the activity, and how long you participated
  - Ex. STLP - 3 years
    Compteted in: photo-manipulation, video production

    ACMS Volleyball Team - 2 years

    Rec League Softball - 5 years
    Won overall tournament - 2018

5

Let's look what goes in each category (part 3)

- HONORS/ AWARDS - any award you've won or received. This could be your team winning the championship, getting chosen as class president, or coming in 2nd at the state spelling bee
  - Ex. District spelling bee winner - 3 years
  - FCA prayer leader - 1 year
  - STLP state champion for web design - 1 year
  - Science award - 1 year

6

Let's look what goes in each category (part 4)

- SKILLS/ STRENGTHS - remember, skills are learned and strengths are what you possess already. We have discussed these when we did your profile cirlce, but as a reminder it could be you are outgoing, work well with others, know how to type, great with technology, etc.
- Make sure you include skills that go with the job. Being able to beat the video game may be a skill, but it wouldn't apply to all jobs hiring.
  - Ex. Familiar with Google programs
    Fluent in Spanish
    Great with math
    Works well with others
    Teamleader
    Patient

7

Category Tips

- Organize your resume how you want. If you want to focus on your skills because you don't have any work experience that is ok.
- If you don't have it or don't want to focus on it then LEAVE IT OFF. Remember, you're trying to impress them with what is GOOD about you!
- Never lie! You may get asked about it during the interview OR it could cause you to be fired later.
- Some information can go into multiple categories. If you want to include the sport team you are on in your Extra-Curricular category and want to mention you won the district championship, you can do it together
  - Ex. ACMS Girls Basketball Team - 3 years
    - District Champs - 2 years
    - MVP Award - 1 year

8

Quiz Time

Click the link below to take the quiz. Once finished, mark “done or turned in” in the Google Classroom assignment.

https://drive.google.com/open?id=10JdwmJQnG3ISqhC1S4GhvyxYaGF-cm8PlMuKFbmmnnQ

Grade 8 Bearcat Day 14 Careers

Careers 14 Quiz

* Required

1. Email address *

2. First Name * 5 points

3. Last Name * 5 points

4. Class period * 5 points

Mark only one oval.

- 1
- 2
- 4
- 5
- 6

5. 1. What are two categories you can include on your resume? * 5 points

6. 2. For each category, what information would be included? * 5 points

7. 3. If you include education you MUST include your GPA. * 5 points

Mark only one oval.

- True
- False

8. 4. Including your work experience of mowing your yard is ok to include on your resume. * 5 points

Mark only one oval.

- True
- False

9. 5. You can only include Extra-Curricular Activities if you are in a club at school. * 5 points

Mark only one oval.

- True
- False

10. 6. If you've never won an award you should list it as "NONE" on your resume. * 5 points

Mark only one oval.

- True
- False

11. 7. Spanish could fall under which category on your resume? * 5 points

Mark only one oval.

- A. Education
- B. Skills
- C. Both A & B
- D. None of these

12. 8. List one tip for resume categories. * 5 points

13. 9. In the space provided, list the categories YOU could put on your resume NOW. * 5 points

Grade 8 Bearcat Day 14 Careers

14. 10. Write out the information that would go in each category. * 5 points