3 Weeks to HISET Graduation

It Started in Indiana

Why we visited -

- Best program in the nation
- Great progression performance
- We went to see what they knew

What we learned -

- Not a specific “Bootcamp”
- They conduct a “study session” then they test
- Their program controls classes AND testing
- They have same day scheduling for testing
- They pay for all testing

HISET BOOTCAMP

- Planning
- Student Selection
- Curriculum
- Results

PLANNING

We had to device a system to mimic the Indiana “study then test” model

- Test Center Coordination - Select dates months ahead of time and block test times
- Limited number of students to test center seats
- Test Vouchers, Dollar General grant
- We schedule all tests during Orientation

Boot Camp Design

Registration – students are **INVITED** based on initial TABE test results

Orientation – Explain program, Reading OPT, Math kick off, and Schedule ALL 5 HISET tests

Classes – 6 mornings with testing after class 5 of the 6 days, see syllabus

STUDENT SELECTION

TABE Test Requirements

- Reading score 4 on a M or higher test
- Math score 3 on a M or higher TABE test (approx. 515)
- Language – no requirement

Student Commitment

- Attendance
- Valid ID
- Access to their HISET account

CURRICULUM

- General plan is simple --

  Study then immediately test

READING is easy

- All students have high TABE reading scores
- Review Test taking tips
- Discuss OPT results or questions
- Review poetry, if needed

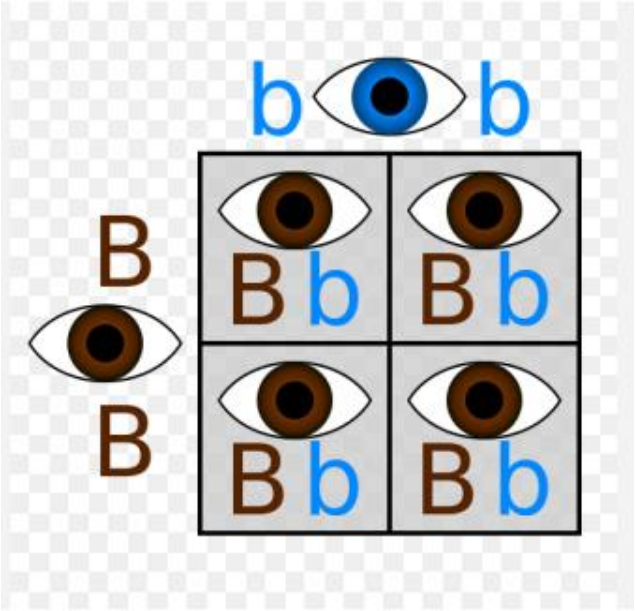
WRITING CURRICULUM

- Review Essay Requirements
- Write a practice essay (2, if needed)
- Grammar Review
  - Commas
  - Redundancy
  - Combing sentences
  - Spelling
  - Parallelism
  - Matching subject and verbs

- Scoreboost Grammar
- Grammar OPT

Essay Must Haves ...

1. Clear position or claim (Be blunt!)
2. At least one (2 or 3 is better) reason for what you believe
3. Supporting details for your reasons
   - Some may come straight from the articles,
   - **Personal examples are a requirement**. It can be made up!! They don't know if you have an Uncle Joe.
4. Identify in writing where your information came from
   - Use words like -- According to article one, Based on a study by the University of Miami, etc…..
   - It is good to quote something from the article.
5. Use transitions
   - Therefore, then, second, however, in addition, etc…..
6. Acknowledge the other side of the argument with ONE sentence
   - 90 to 95% of what you write must be about your side of the argument.
7. Conclusion

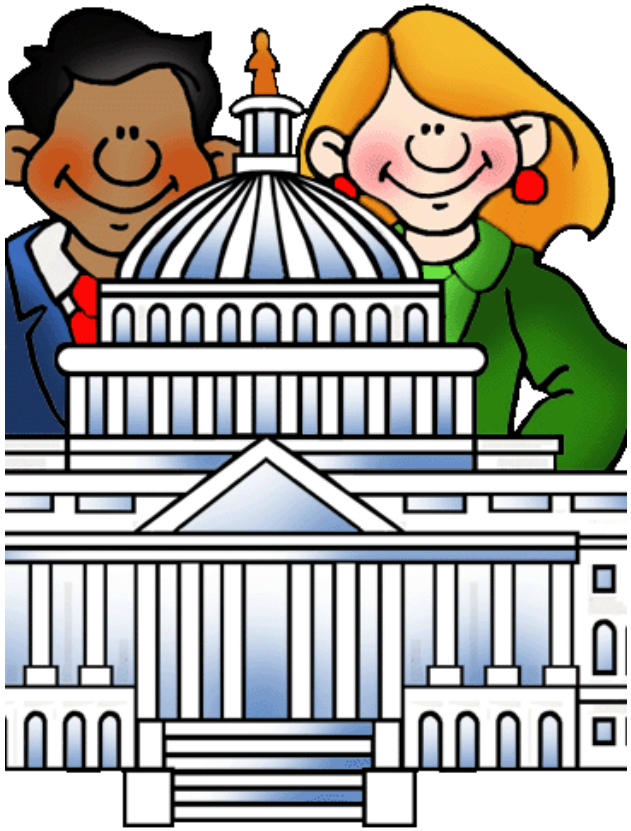


SCIENCE CURRICULUM

- Vocabulary including Scientific Method
- Life Science - Photosynthesis, Genetics (Punnett Square), Food Web, Taxonomy
- Physical Science - Changes of State, Chemical Abbreviations, Balancing Chemical Reactions
- Science OPT

Social Studies CURRICULUM

- US Government - Branches of Government, Checks and Balances, Bill of Rights, Constitution
- History – Revolutionary War, Civil War, WWI, and WWII
- Supply and Demand
- Reading a Graph
- Social Studies OPT



MATH CURRICULUM

- Review Math Study Card and encourage students to use the notes
- Homework -- 6 Math Minutes <u>everyday</u> for about 45 minutes
- Use Math Scoreboost
  - Number Operations
  - Data and Probability
  - Geometry
  - Algebra
- Build back Math competency through repetition, then spend the last 2 days to practice Math

READING GRAPHS

Positive & Negative correlations
Strong & Weak correlations
Outliers

Line, Bar, & Circle Graphs

Probability

Fraction = # of items you're interested in / Total # of items

Probability - a fraction, decimal or percent

p(NOT) = 100% minus p(IS)

Mean - Average
Median – middle point
Mode – most often
Range – high minus low

- Calculate all 4
- Given the mean, find the missing data

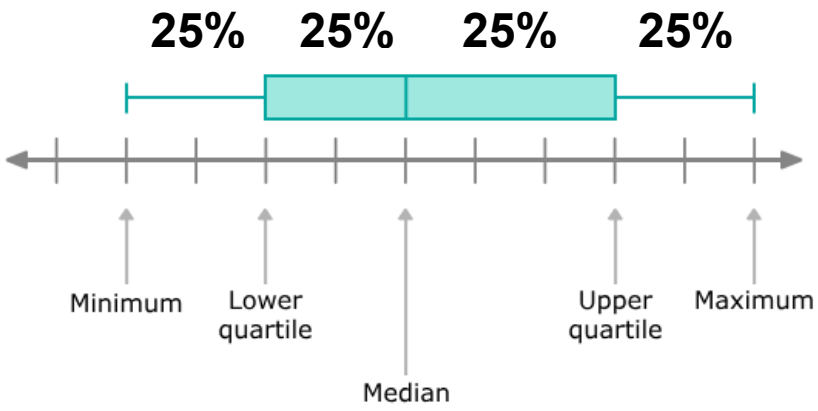
Data & Probability 18%

Probability of 2 or more events – multiply fractions

p(rolling a 6) then p(rolling an even)

$$\frac{1}{6} \times \frac{3}{6} = \frac{3}{36}$$

BOX PLOT – based on medians



COMBINATIONS – how many possible groupings

Simple multiplication problem

in group 1 X # in group 2 X etc.

VOCABULARY

Congruent, Similar
Parallel & Perpendicular
Equilateral & Isosceles Triangle
Right & Acute Angles

ANGLES

90^0, 180^0
Opposite
Sum of angles in a triangle

VOLUME – "3D"

Space inside
Ex: space in a box or cylinder

$V = A_{Base} \times h$

Only 3 base Shapes –

- Rectangle / Parallelogram
- Triangle
- Circle

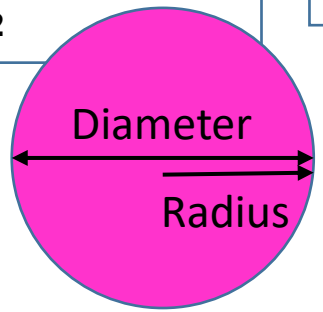
Geometry 18%

PERIMETER – "1D"

Length, distance around
Ex: fence
Add all the sides

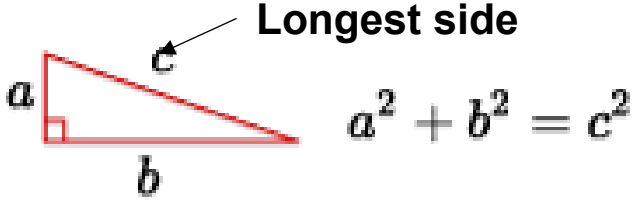
CIRCLE

All formulas include π, 3.14
$d = 2r$
$C = 2 \pi r$
$A = \pi r^2$



PYTHAGOREAN Theorem

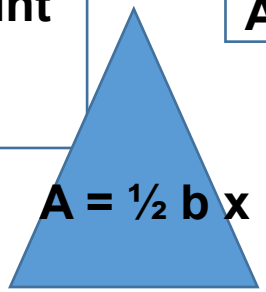
Used to find the missing side of a RIGHT triangle
Ex: Flagpole, ladder, diagonal



AREA – "2D"

Space inside
Ex: flooring, paint
Multiply

$A = L \times W$



$A = \frac{1}{2} b \times h$

Order of Operations - PEMDAS

1. Parenthesis
2. Exponents or Roots
3. Multiply or Divide
4. Add or Subtract

NOTE – "or" does NOT mean "then"

FRACTIONS are PARTS

Fraction = $\frac{\text{\# of items you're interested in}}{\text{Total \# of items}}$

To change a fraction to a decimal **divide** !

NEGATIVE NUMBERS

Memorize the rules, or
Get comfortable with the calculator!!

Number Operations 19%

PERCENT

Special fraction where the bottom is always 100

50% = 50/100

INTEREST

Special application of %, the problem will give you the formula - USE IT!

EXPONENTS / ROOTS

Repeated Multiplication

Base $^{\text{exponent}}$

Ex: $5^3 = 5 \times 5 \times 5$

Roots undo Exponents

$\sqrt{25} = \sqrt{5^2} = \sqrt{5 \times 5} = 5$

Use the calculator

Using Percents

% must be changed to a fraction or decimal before using it in a problem!

5% of \$100 =
.05 x \$100 or
5/100 x \$100

RATIO

Comparing 2 things
Ex: Recipe, speed limits, converting units

$\frac{5}{10} = \frac{x}{6}$ find x

Algebra
45%

VARIABLES

Letters are used to stand for things we don't know.

$5a = 5 \cdot a$ (multiply)
$ab = a \cdot b$ (multiply)

SOLVE FOR x

"Find the Solution"

1. Combine like terms
2. Identify what is being done to "x"
3. Undo using inverse operations
4. In reverse PEMDAS order

COMBINE LIKE TERMS

Combine same letter with same exponent

$2a + 3b - 10 - 5a + 4b + 4 = -3a + 7b - 6$

INEQUALITY

1. Same steps as solving for x
2. If you x/÷ by a negative, flip the sign $\leq \rightarrow \geq$

DISTRIBUTIVE PROPERTY

$5(a + 6) = 5 \cdot a + 5 \cdot 6 = 5a + 30$

$2a(3a - 6b) = 2a \cdot 3a + 2a \cdot -6b = 6a^2 - 12ab$

FUNCTION

A rule written like an equation
$f(x) = 2x + 3$ same as $y = 2x + 3$

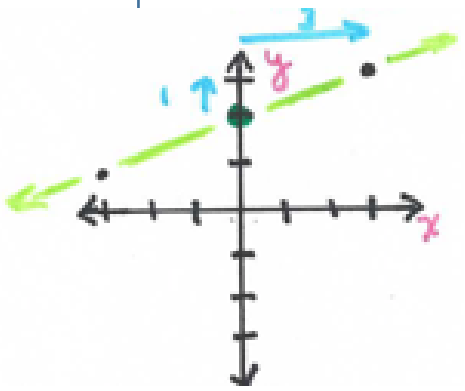
Input → function → output
domain rule *range*
"x" f(x) or "y"

Find f(6) if $f(x) = 3x - 7$, plug in 6 for x

$y = mx + b$

Straight line formula
m = slope or $\frac{\text{rise}}{\text{run}}$
b = y intercept

$y = \frac{1}{3}x + 2$



Results

We have conducted -

- Five sessions of Bootcamp
- Spanning 2.5 years
- We found a system that works well for us
- Fine tune

39 students → 39 HISET grads!!

Take Aways

- The class would not work without all the planning and coordination with the test center
- Our TABE test criteria (after fine tuning) works well
- We need to advertise, we don’t always have enough students to justify a class
- The curriculum works for any student not just Bootcamp students

Questions ??