



JR. GENIUS ED . SERVICE S INC . **STUDY TO SUCCEED**

By: **D. HOROCHOWSKI BSc. BEd. RNC**
(President of Jr. Genius Ed. Services Inc.)

METHOD:

S- SURVEY

Q- QUESTION

3R's: **R-** READ

R- "WRITE"

R- REVIEW

ASK YOURSELF:

Why do people write newspapers, magazines and editorials in column form? The reason for this is that it makes the **data easy to find**, it's **organized**, the titles are in **bold**, the reading is **fast**, it's easy to backtrack and your thoughts are organized.

You will struggle with different study methods during your educational years. Nevertheless, studying takes work...but you can **maximize your time** and be **guaranteed great marks** if you apply yourself honestly and efficiently. Here is the method that opened my doors to a future that allowed me to pick any career that I pleased.

TESTIMONY-

D. HOROCHOWSKI-President of Jr. Genius

I was an average Gr. 9 student who struggled with every study method imaginable. By my senior high school years, I had mastered my own study method, and was getting A's in all my courses, especially the Maths and Sciences, and often learning concepts better and more efficiently on my own than in a classroom. As a result, I ended up teaching many courses to myself and attending school classes only when **absolutely** necessary (not that I'm recommending it). I also had time for an awesome social life, a part-time job, some modelling and a chance to pursue my love for classical singing.

I have taught this method in all of my science and math classes and have stressed its importance. I rarely assigned homework questions; rather, students submitted their own study notes prior to a unit test and I evaluated them. It was evident that many of those who excelled were the ones who submitted proper study notes and followed this technique. It was also evident that those who received failing or average marks on tests, also had submitted poor or no study notes at all.

As a student of Jr. Genius, you are **strongly urged** to follow this method while your tutor supports you with the course material. I guarantee that you will **learn more efficiently in less time** and have **free time** to pursue other interests that you may have. **Enjoy learning! BEST WISHES TO YOU!**

THIS TECHNIQUE WORKS BECAUSE IT FOCUSES ON ALL THE TYPES OF LEARNING STYLES... VISUAL, AUDITORY, AND KINESTETIC!

STUDY TIPS:

****For best results keep study notes very organized****

1. Write **small**.
2. Divide a page into **columns** (similar to a magazine). This will reduce your study note volume and the whole unit sequence will be easier to see.
3. Indent explanations of terms.
4. **Boldly** write **topic headings** before the actual info.
5. **Highlight problem areas** and keep studying these a lot (teachers will ask the things they know you will have trouble with).
6. **Organize** memory work before writing it into the study note (eg. Alphabetically, numerically, pneumatically, etc).
7. Try with a **mechanical pencil** (to eliminate mistakes and keep things small and neat).
8. Try dividing the **page sideways** into three columns to get more info on the sheet (see eg.). Try loose-leaf on its side, computer paper or blank paper. This will help you to see the whole unit as it evolves, as a whole.
9. **Don't write on the backs** of the study notes. You will be able to see the course sequence this way and see where your problem areas are. Save the backs of the notes for challenging questions relating to the notes on the front.

A TYPICAL STUDY NOTE: **** Use for all subjects****

- Divide sheet into 3's (or loose-leaf into 2 -upright).
- Unit title/Chapters Sections should stand out (**bold** or **highlighted**).
- Write the terms near the column then indent explanations & examples, to allow you to cover them up to test yourself.
- Highlight terms (color code while reviewing).
- Use lines to divide each section (see fig.1 – chap 16.1 from 16.2).
- *****Star areas** in which you are having difficulties (see 17.3 – Radiation).

FIGURE 1: Typical Science Study Note

<p>UNIT 1 – HEAT & ENERGY</p> <p>Chapter 16 - Heat & Thermal Expansion</p> <p>16.1-Sources of Heat</p> <p>Heat def-----</p> <p>Sources 1-----</p> <p>(5) 2-----</p> <p>3-----</p> <p>4-----</p> <p>5-----</p> <p>Energy: -----</p> <p>Eg-----</p> <p>Work:-----</p> <p>Eg-----</p> <p>Kinetic E-----</p> <p>Eg-----</p> <p>Potential E-----</p> <p>Eg-----</p>	<p>Kinetic Molecular Theory (KMT)</p> <p>(4) 1-----</p> <p>2-----</p> <p>3-----</p> <p>4-----</p> <hr/> <p>16.2 Thermal Expansion</p> <p>Thermal Exp. (def) -----</p> <p>Thermometers:-----</p> <p>Temperature:-----</p> <p>Heat-----</p> <p>Eg-----</p> <p>Thermometers (2) 1. Dial</p> <p>2. Liquid</p> <p>LAB SUMMARY</p> <p>Thermal Exp-----</p> <p>-----</p>	<p>CHAPTER 17 – 3 Types of Heat Transfer</p> <p>17.1 – Conductors</p> <p>Def-----</p> <p>Egs. 1-----</p> <p>2-----</p> <hr/> <p>17.2 – Convection</p> <p>Def-----</p> <p>Egs. 1-----</p> <p>2-----</p> <p>3-----</p> <p>4-----</p> <p>17.3 – Radiation ***</p> <p>Def-----*</p> <p>Egs. 1-----</p> <p>2-----</p> <p>cont.../2</p> <hr/> <p>LAB DEMO SUMMARY</p> <p>Conduction=====</p> <p>Convection=====</p> <p>Radiation=====</p>
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STUDY INTERVALS: (Using the SQ-3R METHOD)

SESSION 1: APPROX. 35 min

1. **SURVEY** about 1 or 2 major topics / session (2 min.).
2. **QUESTION** what is the relationship between topics? How do they relate ? (1 min.).
3. **READ** text sections, related class notes over slowly and carefully to understand. If class notes aren't clear, check your text, dictionary, or other resource and supplement the class note...(10 min.)
4. **WRITE** out organized study notes in **your own words** onto the study sheet. Use the **text book titles** as the sequence for the unit topics, while you use the class notes as a guide to what will be stressed on the test. **Don't copy!** Make sure you understand what is written. If not...ask your tutor or teacher the next day. (20 min.)

BREAK FOR 10 MINUTES

SESSION 2: (35 min)

1. **SURVEY/QUESTION** 1 or 2 NEW topics
2. **REVIEW** SESSION 1, by reading the study note slowly at first, and then faster as you become more familiar with the material. **Highlight** (colour code) the **unit titles**, **subtitles** and **topics** as you read the study note. This will help you to concentrate and improve your visual memory, as well as make topics easy to find.
3. **READ** over those new topics slowly (from step 1) (10 min.)
4. **WRITE** new study note.

BREAK FOR 10 MINUTES

SESSION 3: (35 min)

1. **SURVEY/QUESTION** new topics.
2. **REVIEW** session 1 quickly; **highlight** problem areas using *****
3. **REVIEW** previous session 2, a little slower, highlighting the Unit titles and topics and reading the study note.
4. **READ** new topics, previously surveyed in # Step 1.
5. **WRITE** study notes on new topic.

BREAK FOR 1 HOUR

(if you're not cramming)

- Continue this procedure of “reviewing the old and relearning the new” until you have completed what will be covered on the test.
- Then WORK the study note topics by **listing all the titles and terms on a sheet** and try to explain to yourself these terms without looking at the notes. Focus on, and constantly review the material you have problems with.
- Remember to **review** this material **prior to the test**. Your brain loses **40%** of the material learned within 24 hours without any recall. These notes will be easy to review and very familiar to you by now.
- **Write down** just the titles and key terms in sequence. If you can talk your way through the unit with just the titles, you know your stuff!!!
- **When you get the test**, jot down the unit title sequence **very quickly** and any information that you fear you will forget on the test. **Survey/Question/Read the test** over quickly. Jot brief, tiny info key points (pencil) on the sides of

questions that you know right away. Put a ? beside those questions that are more challenging and may take some thought. (do these questions last).

- If you have a **multiple choice section...only proceed to it after** completing the previous steps. The wrong answers in this section may confuse you when you get to the written section. I recommend you do this section after completing as much of the written test as possible. If you are using a **Scantron Card**, you should work out your solutions directly on the test paper, eliminating the wrong answers and circling the best response. Star ** the questions that you are unsure of. (If your teacher tells you not to write on the multiple choice section...either write lightly in pencil, erasing the evidence later, or protest later!! It is sometimes easier to ask for forgiveness, then permission...HEY, MARKS MATTER !!!
- **Save ample time** at the end of your test to transfer your answers to the Scantron Card.
- Try that **tough question** again. Part marks may be awarded.
- Look over your test if you have **extra time**. USE every minute to pack in those marks!
- Take time to **reward yourself** for a job well done!

Keep your **priorities** straight, maintain a **willingness** to learn (fake it, if you have to) and follow this 3-Method, **study skills** technique carefully. You may be surprised how much you will like the course, once you start doing well.
KNOWLEDGE IS POWER!!!

EFFECTIVE LEARNING STRATEGIES

Note Taking is the most important method for success in school.

1. Get a large loose leaf notebook or binder (organize notes in a chronological order).
2. Draw a **vertical line** down the page, and write **notes** in the **right** hand column.
3. **Record** the main ideas and link them with detail (eg. Science is very lecture based).
4. If there is **no time**, then record the main ideas and fill in the details immediately after class.
5. Jot down key notes in the **left** hand recall column. This is a good review and a time saver for an exam or a test.

TIPS:

- a. **Paraphrase notes** – think and understand before recording
- b. **Condense information** – through keywords, short-forms and phrases vs. sentences
- c. **Prepare for note taking** – know and read up on the topic prior to the lesson, in order to increase understanding.
- d. Sometimes a **small tape recorder** is **helpful in lectures** when the material is quick paced and detailed. In this case, one with a **meter** reader would be most time efficient. This way you can record the meter number in your notes, where the information was missed and later fast forward the tape to that section to supplement your notes later. **Avoid** listening to the whole tape over again. **Write** as **fast** and as much as you can during the lecture.

Some studies show that very few people can concentrate for more than twenty minutes at a time on one thing. So relax and try to tune in for the most important points of a lecture.

Helpful Tips to Improve Long Term Memory:

1. **Read – Study System:**
 - a) **Preview** the reading section (get overview)
 - b) **Identify** the purpose (reassures interest)
 - c) **Read** and summarize the information (stored in short term)
 - d) **Review** the section (transfer to long term)
2. **Schedule regular study sessions:** study in the same place and at the same time each day. Study and review in small bits (ie. 35min. study , 10 min. break).
3. **Memorize in a good organized way:** alphabetical order, word lists, number sequences, logical notes, associations and categories.
4. **Memory lists and keys:** make word lists and organize them into categories. (ie. Key words may be used to trigger off main concept, phrases.) number the key points for each topic.

- eg. PHOTOSYNTHESIS – (4) light reaction
(7) dark reaction
(3) chloroplasts
(4) plant adaptations
(5) limiting factors
(10) Leaf structure: Parts/function

HOW TO STUDY MATHEMATICS

1. Organize the new material by outlining the major ideas.
2. Keep an **organized, indexed** notebook, with your class notes separate from the math homework.
3. **AFTER EACH CLASS**, make study notes by combining the textbook concepts with the class notes, under the correct heading that corresponds to that section of the **text** of the unit to be covered. Use the textbook as a guide. **TIP:** Try and write all your class notes in **column form**. You will see the content and sequence of the lesson and unit much better.
4. **Prior to exams**, take the study note and condense it into a CRAM NOTE to summarize the course math concepts. (SEE MATH CRAM NOTE- pg 6).
5. After the **homework** has been **taken up** in class, include the questions that you had difficulty with, in the study note section, on the **backs** of the study note pages.

When doing your homework:

6. Check the **accuracy** of your work. **Estimate answers** to see if your result is reasonable, and use these answers to help locate difficulties (like misplacement of a decimal point), but not to suggest methods.
7. Complete your **written work** in an **ORGANIZED, NEAT MANNER**. Use ample writing space to avoid confusion. Use a mechanical pencil for neatness and easy corrections.
8. Work independently. **We learn best and remember longest those ideas that we have discovered by ourselves.**
9. Correct all homework problems and clean up difficulties. Only **PERFECT PRACTICE MAKES PERFECT.**
10. **THE TEXTBOOK REVIEW SECTIONS** at the end of each unit are excellent practice for studying the concepts that have been learned in the chapter, since the questions are combined and similar to a test type approach.
11. Try to learn the material in such a way that you can **look at the subtitles** of the unit and **be able to freely** state the formulas and what the math language means, without hesitation. You will lack confidence on a test, if you are not sure of a concept.
12. **During the tutoring** lesson, **ASK QUESTIONS**. Do not remain confused. Ask for an explanation and keep on asking until you understand the explanation.
13. Accept the responsibility for learning. No school book, course, tutor, or teacher ever gave anyone an education; they only provide the opportunity for one. Your tutor cannot do your learning, only you can do that! **If you have any questions, concerns or difficulties do not hesitate to email HEAD OFFICE (danah@jrgenius.com).** We want YOU to do well! **Be optimistic** about your progress. Enjoy overcoming obstacles and expect some problems to be frustrating. **"There is no victory, without a fight...No dawn, without a night!"**



FIGURE 2: Typical Math Study Note

<p>UNIT 1 – REVIEW OF BASIC SKILLS</p> <p>Sections</p> <p>1.1 Whole #'s, Decimals 1.2 Rounding 1.3 Estimating 1.4 Factors and Exponents 1.5 Percents 1.6 Percent Problems 1.7 Algebraic Expressions</p> <p>1.1 Whole #'s & Decimals</p> <p><i>Steps</i></p> <p>A) Add E.g. $18.32 + 5.2$ 1) --- Rule: 18.32 2) --- $\begin{array}{r} 18.32 \\ + 5.2 \\ \hline 23.52 \end{array}$ 3) ---</p> <p>B) Subtract E.g. $18.32 - 5.2$ 1) --- Rule: 18.32 2) --- $\begin{array}{r} 18.32 \\ - 5.2 \\ \hline 13.12 \end{array}$ 3) ---</p> <p>Add / Subtract Decimals</p> <ul style="list-style-type: none"> line up the decimals solve round, if required <p>C) Multiply</p> <p>E.g. 18.32×5.2 1) --- Rule: 18.32 2) --- $\begin{array}{r} 18.32 \\ \times 5.2 \\ \hline 95.264 \end{array}$ 3) ---</p> <p>Multiply Decimals</p> <ul style="list-style-type: none"> put bigger #r on top count # of decimal places in both numbers add total # of decimal places (after decimal) in the question place the decimal place in the answer (equal to total from right to left) 	<p>D) Divide</p> <p>Dividing Decimals</p> <ul style="list-style-type: none"> divisor on the outside, dividend on the inside, and quotient is on the top always make the divisor into a whole number adjust the decimal place in the dividend to the same # of places place the adjusted decimal place in the quotient <p>E.g. $5.2 \overline{)18.32}$</p> $\begin{array}{r} 3.5 \\ 5.2 \overline{)18.32} \\ \underline{156} \\ 272 \\ \underline{260} \\ 120 \\ \underline{116} \\ 40 \\ \underline{40} \\ 0 \end{array}$ <p>1.2 Rounding</p> <p>5982.75</p> <p>Round to the nearest:</p> <p>1) hundredth (or 2 decimal places) 5982.75</p> <p>2) tenth (or 1 decimal place) 5982.8</p> <p>3) whole # (or one) 5983</p> <p>4) ten – 5980</p> <p>5) hundred – 6000</p> <p>6) thousand - 6000</p> <p>Rules of -----</p>	<p>1.3 Estimating</p> <p><i>Steps</i></p> <p>1) Round off #s in question 2) Calculate using the numbers rounded</p> <p>Rule:</p> <p>To estimate, round to numbers with which you can calculate in your head.</p> <p>Check:</p> <p>Examine your answer and see if your estimate is higher or lower than the actual number</p> <p>1.4 Factors and Exponents</p> <p>2^4 } power</p> <p>large number is the base</p> <p>smaller number in right hand corner is the exponent</p> <p>ex: $2^4 = 2 \times 2 \times 2 \times 2 = 16$</p> <p>format :</p> <p>a number to the power of another number = that number multiplied as many times as the exponent is</p> <p>Eg. -----</p> <p>Rules: ----- -----</p> <p style="text-align: right;">(cont'd on pg.2)</p>
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Hard Homework Questions on back



STUDY TIPS:

****For best results keep study notes very organized****

- In class, take notes from the board in **column form**.
- Make **separate section for notes/hard questions** and end unit reviews before test
- Don't write on the backs** of the study notes. Use only the front of the study notes so that you can see the sequence of units. Save the backs of the notes for challenging questions and difficult homework problems relating to the notes on the front.
- Homework** should be kept in a **different section/divider**

GRADE 10 ACADEMIC MATH- CRAM NOTE

Chapter 1: Using Linear systems to solve problems

- 4 types** - Break Even Problems
Relative Value reasoning
Mixture Problem
Rate problems

Linear system

No solution = same slope different y-int
1 solution = different slope, y-int doesn't matter
Infinite solution = slope and y-int same

Substitution

-the method uses this relationship to replace one variable with an expression in terms of the other. This results in one equation, with one unknown that can be solved

1. Choose one of the equation and isolate an variable
2. Sub it into the other equation
3. Now only 1 variable. Solve it.
4. Then sub the result to the equation to find the other variable

Elimination

- If coefficients of same variable in both equation have same value. Eliminate by adding or subtracting the equation.

Chapter 2: Coordinates and Geometry- Where shapes meet symbols

- Distance from origin (0,0) to any point is $d^2 = x^2 + y^2$

- Equation of a circle is $r^2 = x^2 + y^2$

- Distance between points is $d^2 = \Delta x^2 + \Delta y^2$

- Midpoint of a line $(x_1 + x_2/2), (y_1 + y_2/2)$

- Median - a line that joins a vertex of a triangle to the midpoint of the opposite side.

- Perpendicular Bisector of a line segment is the line that is perpendicular to the line segment and passes through the midpoint of the line segment

- Altitude - a perpendicular line that connects to the vertex on the opposite side.

Centers of a triangle

Centroid - determined by finding the equations of two median lines, than finding the point of intersection of those 2 lines. It can also be found by calculating the mean of the x and y coordinates of all three vertices

Circumcenter - Determined by finding the equations of the perpendicular bisectors of 2 sides then finding the point of intersection.

Orthocenter - determined by finding the equations of 2 of the altitude lines, and then finding the point of intersection of those two lines.

Chapter 3: Analyzing and Applying Quadratic Models

- First difference same then **linear**,
- 2nd difference same then **quadratic**.
- **Parabola** - Graph of quadratic relation.
- **Vertex** - point on the graph with greatest or least y coordinates

- **Quadratic** relation expressed in form $y = ax^2 + bx + c$
- **Factored form** $y = a(x-s)(x-t)$

Chapter 4: Graphing Quadratic Relations and Using Them as Models

- **Vertex form** $y = a(x-h)^2 + k$
- Rewritten from standard form by completing the square
- Another way of solving quadratic relation is using the **quadratic formula**

- If $b^2 - 4ac > 0$, then quadratic relation has 2 real root
- If $b^2 - 4ac = 0$, then quadratic relation has 1 real root
- If $b^2 - 4ac < 0$, then quadratic relation has no real root

Chapter 5: Introduction to Trigonometry

- **Congruent** triangles are identical in every way.
- **Similar** triangle has same shape but different in size.
- Side Side Side theorem (**SSS**) - all 3 sides are proportional
- Side Angle Side (**SAS**) if 2 pairs of corresponding side are proportional and the contained angle equal.
- Angle Angle (**AA**-) 2 pair of angles are equal

The **3** primary **trig** ratios are:

- $\sin A = \text{Opposite}/\text{Hypotenuse}$
- $\cos A = \text{Adjacent}/\text{Hypotenuse}$
- $\tan A = \text{Opposite}/\text{Adjacent}$

- Memorize by **Sohcahtoa*******
- Are used to solve angles

Chapter 6: Investigating Non-Right Triangles as Models for Problems

- **Sine Law** - $a/\sin A = b/\sin B = c/\sin C$
 - Need either 2 angles or one side, or 2 sides and one angle across from a known side.
- **Cosine Law** - $c^2 = a^2 + b^2 - 2ab \cos C$
 - Used to find the third side when two sides and a contained angle are known or to find an angle when all 3 sides are known

Grade 10 Academic Science Weather Unit Cram Note

UNIT 3 WEATHER DYNAMICS

CHAPTER 13 – GLOBAL WEATHER DYNAMICS

13.1 A Closer Look at the Earth

weather → is the set of environmental conditions encountered from day to day

climate → is the set of environmental conditions averaged over many years

13.2 Earth's Energy Balance

4 methods of **energy** transfer:

1. radiation
2. conduction
3. convection
4. advection

13.4 The Atmosphere

def. blanket of air and moisture that surrounds the earth

Atmospheric Layers: (6)

1. troposphere
2. tropopause ****
3. stratosphere
4. mesosphere
5. thermosphere
6. exosphere

temperature gradient → change of temp. over a distance, temp. gradient of troposphere is about -6 degrees Celsius per 1000m, above troposphere temp. gradient uniform

Atmosphere Pressure

Def. the pressure the air exerts as gravity pulls it towards the center of the earth

Pressure gradient → measure of the amount the atmospheric pressure changes across a set distance, can be vertical or horizontal

13.6 Prevailing Wind Patterns

def. winds that affect large areas

The Coriolis Effect

def. apparent change of direction of a moving object in a rotating system

Major **Prevailing** Winds:

At equator → air rises

At 30degrees → air falls

At 60degrees → air rises

At the poles → air falls

Jet Stream → occurs at about 30degrees latitude, a high-altitude, eastward flowing wind

13.8 The Hydrosphere

def. all of earth's water, both fresh and salt, liquid and ice, the hydrosphere makes up around 70% of Earth's surface

The **Water Cycle:**

Three types of evaporation:

1. sublimation (ice)
2. evaporation (water)
3. transpiration (land)

13.9 Major Ocean Currents

def. vast volume of water at the equator where radiation from sun is direct, oceans spread around the world by ocean currents and absorb all this direct energy

13.11 Clouds and Fog

convective clouds → air near surface absorbs energy (oceans, lakes, asphalt and dirt), becomes warmer and rises in atmosphere carrying vapour w/ it, expands, cools and loses energy, vapour cools and condenses, forming clouds

fog → cloud that forms close to the ground

Classifying Clouds

2 general types of clouds:

1. Cumulus Clouds (round)
2. Stratus Clouds (flat)

CHAPTER 14 – FORECASTING WEATHER

14.2 North American Weather Systems

weather system → set of temp., wind pressure, and moisture conditions for a certain region, weather systems (mostly air masses) move from west to east

Air Masses

Def. a large body of air which the temp and moisture content at a specific altitude is fairly uniform, air takes moisture and temp properties of the surface

Cold polar air → brings dry, cold weather

Warm moist air → brings wet, warm weather

Low Pressure System:

- Bring cloudy skies and stormy weather

Cyclone → low pressure, counter-clockwise swirling air

Stationary Front

Def. occurs when a boundary between warm and cool air masses remain fairly still for some time

High-Pressure System

Anticyclone → a high-pressure system that rotates clockwise and brings clear skies

14.4 Regional Weather

Sea Breezes

Land Breezes

Lake-Effect Snow

Chinook Winds

14.5 Precipitation

def. wather that reaches the ground either as liquid or solid form, stage which follows condensation freezing or sublimation

14.6 Humidity

def. measure of amount of water vapour in the atmosphere, affects the weather as well as how comfortable you feel

Dew and Dew Point *****

Def. forms when air reaches the saturation temp. meaning when the humidity is 100%, temp at which dew forms is called the dew point

14.8 Weather Heritage and Lore-Indian Summer

Weather Satellites and Aircraft

Weather satellite→orbiting spacecraft, regularly gathers weather related data

Ground-Based Technology (5)

Thermometer→measures max and min temps.

Anemometer→measures wind speed and dirction

Rain gauge→measures rainfall

Hydrometer→measures humidity

Aneroid Barometer→ measure atmospheric pressure

CHAPTER 15 – EXTREME WEATHER EVENTS

15.1 Weather Records and Events

- Reported in media

15.3 Thunderstorms and Tornadoes

thunderstorm→storm w/lightning, thunder and heavy rain

3 main stages:

- developing stage – updrafts occur
- Mature stage – updrafts and downdrafts cause unstable circulation cycle, heavy precipitaion
- Final Stage – reduced precipitaion

Tornadoes→severe storm, rotating funnel of air extends from base of storm cloud to ground

15.4 Floods and Droughts

flood→excess water from rain, rivers/oceans overland that can't soak up any more water

drought→long period w/much less rainfall than average

15.6 Hurricanes, Typhoons and Tropical Cyclones

hurricane→severe cyclone that occurs in west Atlantic Ocean, Carribbean Sea and Gulf of Mexico

typhoon→severe cyclone that develops in NW Pacific Ocean

tropical cyclone→severe cyclone that develops in Indian Ocean and area around Australia

15.7 Blizzards

def. a severe snowstorm w/ strong winds and low temps.

15.9 Extreme Heat and Cold

heat wave→period of more than 3 days at or above 32 degrees temp inversion→warm layers of air in a high-pressure system move over and push down cooler air

Extreme Cold and Wind Chill

Def. Measure of the cooling effect of wind on a body

15.12 El Nino and La Nina

def. extreme weather events around world were a result

El Nino

- Shift in ocean currents
- Temp gets warmer

La Nina

- Opposite of El Nino – shift to colder than average temps. In eastern pacific
- Hurricanes develop more easily

CHAPTER 16 – FORECASTING THE FUTURE

16.1 Evidence of Change

Temperature is one factor

16.2 Greenhouse Effect and Ozone Depletion

def. Sun's energy being reflected off the surface of the Earth and reflecting back through atmosphere where CO2 and othe gasses (low%) molecules absorb this energy and re-radiate it back to the earth

16.5 Microclimates

def. set of atmospheric conditions that differ from those of surrounding areas

16.7 Our Disapearing Forests

deforestation→the removal (cutting down) of trees

effects: (3)

- Increased CO2
- Moderate temps
- No flood stoppers

16.8 Canada's Fragile North

The Nothern Habitat

Tundra→vast treeless region where the ground beneath is frozen with little precip. And windy conditions

16.10 Weather of the Future

2 factors will affect weather:

- natural events (hurricanes, volcanoes)
- human activities (cars, pollution)