

#### **Best Practices**

#### **Assessment Guidelines**

For the Intermediate or Secondary Classroom
Teacher With a Student Who Has a Visual
Impairment and

#### **Reads Print**

2010

A Resource Project by the Provincial Resource Centre for the Visually Impaired (PRCVI)

PRCVI is a Ministry of Education Provincial Resource Program

Provincial Resource Centre for the Visually Impaired (PRCVI)

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#### **Mission Statement**

Students with visual impairments have unique needs and challenges when demonstrating subject knowledge through tests. The responsibility for assessments lies with the classroom teacher. With appropriate accommodations, students with visual impairments are able to accurately demonstrate their knowledge and skills. Most test questions can be formulated or adapted to minimize the need to acquire and process visual information.

The following guidelines have been developed to assist classroom teachers in making assessment accommodations to both informal and formal tests without compromising integrity, reliability or validity. A Teacher of Students with Visual Impairments should be consulted during the development of test items.

#### **Contributors' Notes**

In order to illustrate both the "Instead of This" and the "Try Doing It This Way" examples have been reduced in size to fit on one page. If the reader of this document requires the information to be in a larger format, please go to the Provincial Resource Centre for the Visually Impaired (PRCVI) website at <a href="www.prcvi.org">www.prcvi.org</a> and use either an enlargement software program or the Microsoft Word zoom feature.

It would be very helpful to print this document using a colour printer as many of the examples use colour to illustrate important adaptations.

Many of the following suggested guidelines may be beneficial to all students.

#### **Test Administration**

- Students with visual impairments should be expected to demonstrate competency in the same learning outcomes as their peers.
- Extra time may be required (often 3 or 4 times above what is required for a sighted student).
- Longer exams may need to be divided into sections to allow for them to be taken over a period of time or even days, with breaks during each sitting.
- A separate setting with qualified supervision must be available.
- Oral clarification of test questions should be provided to the student by a supervisor, if needed.
- Provision must be made for students to respond to test items using the equipment and materials best suited and familiar to them.
- Students with visual impairments should be active participants in lab tests and/or paired with a sighted partner when necessary.

#### **Formulation of Test Questions**

- Questions that contain complex visual information should be reviewed. Adaptations may be made or questions may be replaced as long as mastery of learning outcomes is demonstrated.
- Tables, diagrams and graphs are difficult and time consuming to interpret and process. The greater the visual complexity of the tables, diagrams and graphs, the more challenging it is.
   Try to keep the information clear, concise and relevant.
  - Real objects or 3-D models may be necessary to represent some visuals.

#### Things to Keep in Mind

The following are general guidelines to keep in mind when creating assessments, however, please remember that every student's visual condition is unique and therefore collaboration with a Teacher of Students with Visual Impairments is necessary. Every student in the class will benefit from the improvements made to the assessments.

- Font size standard large print font is 18 to 20 pt.
  - This is 18 pt. Arial Font and this is 20 pt.
     Arial Font.
- Arial, Courier and Century Gothic are some recommended font styles.
- Avoid clutter or crowding of print, graphics and visuals (white space is important). Only include relevant information. Limit visuals and "cutesy" graphics. Avoid information overload.
- Contrast helps to increase clarity and sharpness of detail.
- Real objects or 3-D models are helpful when showing depth, graphics or mapping.
- Exhaustion may result from engaging in tasks requiring the use of vision; frequent supervised breaks are necessary.
- Additional time for tests is recommended.
- When enlarging materials on a photocopier be aware of and check:
  - Font size of the main text
  - Quality and contrast
  - Everything fits and has been copied
  - Use white or cream paper not coloured

#### **Tables & Charts**

#### **Math**

#### Redesign the question to remove extraneous information.

#### Instead of This

Refer To Data

Booklet

Refer to the Sales Taxes in Canada in the Data Booklet to answer question.

	Α	В	С	D	E	F	G	Н	1	J
1	Item	Price (\$)	Quantity		Total (\$)					
2	T-shirt	15.99	20		319.80					
3	Shorts	23.99	12		287.88					
4	Socks	6.99	30							
5				Subtotal						
6				GST						
7				PST						
8				Total	874.60					

These items were purchased in Alberta.

- A. Statement is always true.
- B. Statement is sometimes true.
- C. Statement is never true.

#### Try Doing It This Way

Refer To Data

Booklet

Refer to the Sales Taxes in Canada in the Data Booklet to answer question.

	Α	В	С	D	E
1	ltem	Price	Quantity		Total (\$)
2	T-shirt	15.99	20		319.80
3	Shorts	23.99	12		287.88
4	Socks	6.99	30		209.70
5				Subtotal	
6				GST	
7				PST	
8				Total	874.60

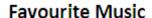
These items were purchased in Alberta.

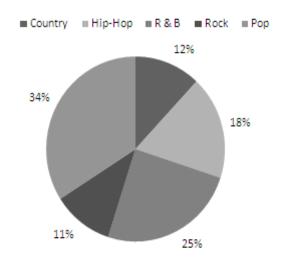
- A. Statement is always true.
- B. Statement is sometimes true.
- C. Statement is never true.

#### **Graphs** Example 1

Redesign the question by: enlarging font/ graph size and increasing segment differentiation through use of colour/texture.

#### Instead of This

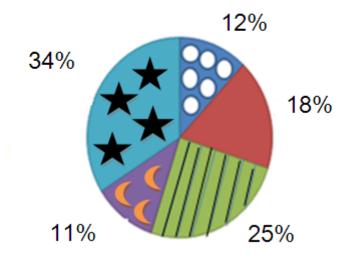




#### Try Doing It This Way (print in colour)

#### **Favourite Music**



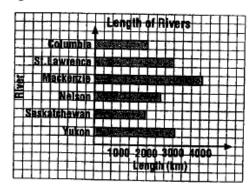


#### **Graphs** Example 2

Redesign question by: removing text from grid and increasing fonts/ graph size/ contrast /spacing.

#### Instead of This

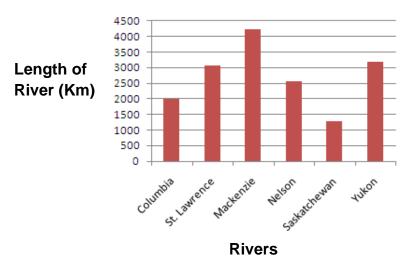
The graph displays the approximate lengths of the 6 longest rivers in Canada.



- 1. About how long is the longest river?
- 2. Which rivers are longer than 2500 km?

#### Try Doing It This Way

#### **Canada's Longest Rivers**

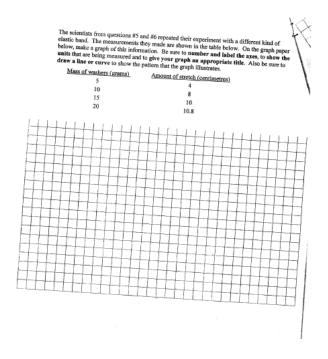


- 1. About how long is the longest river?
- 2. Which rivers are longer than 2500 km?

#### **Graphs** Example 3

#### Ensure graph grid is clear, bold, and large.

#### Instead of This



#### Try Doing It This Way

The scientists from questions #5 and #6 repeated their experiment with a different kind of elastic band. The measurements they made are shown in the table below. On the graph paper below, make a graph of this information Be sure to **number and label the axis**, to **show the units that are being measured and to give your graph an appropriate title.** Also be sure to **draw a line** or curve to show the pattern that the graph illustrates.

Mass of washer (grams)	Amount of stretch (centimetres)
5 10 15 20	4 8 10 10.8

#### <u>Tables and Charts</u> <u>Science</u>

#### Redesign the question to include table information.

#### Instead of This

Planet Name	Diameter (km)	Maximum Distance from Sun (millions of km)	Average Surface Temperature (°C)	Length of Year (in Earth units)
Mercury	4880	70	-170 to 350	88 days
Venus	12 100	109	480	225 days
Earth	12 756	152	22	365 days
Mars	6787	249	-23	687 days
Jupiter	142 800	816	→150	12 years
Saturn	120 000	1507	-180	30 years
Uranus	51 800	3004	-210	84 years
Neptune	49 500	4537	-220	165 years
Pluto	3000	7375	-230	248 years



#### Analyze

- 1. Which planet is the:
  - (a) largest?
  - (b) coldest?
  - (c) one with the shortest orbit time?
  - (d) one that is closest to the Sun?
  - (e) one that is closest to Earth?
  - (f) one that is most similar to Earth?

#### Conclude and Apply

2. Why is it important to know the orbits of the planets when planning a space mission in the solar system?

- 3. (a) Which planet is probably the easiest for humans to visit? Why?
  - (b) Which planet is probably the most difficult for humans to visit? Why?
- Write a short story, poem, or song about the planet you would most like to explore.

#### **Extend Your Skills**

Most planets have several moons orbiting around them. Research to discover which planet has the most moons.

#### Try Doing It This Way

Which one of the following planets is the largest?

A. Uranus 51, 800

B. Saturn 120, 000

C. Jupiter 142, 800

D. Neptune 49, 500

E. Mars 6787

F. Pluto 3000

G. Earth 12, 756

Which planet is the coldest?

A. Saturn -180 degrees

B. Pluto -230 degreesC. Neptune -220 degrees

D. Mercury -170 – 350 degrees

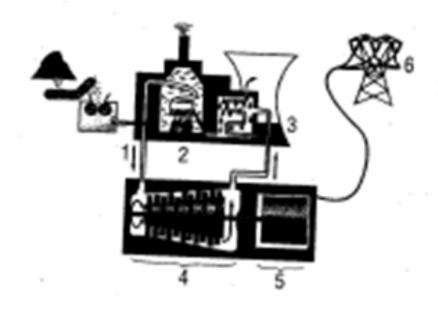
E. Mars - 23 degreesF. Jupiter - 150 degrees

G. Uranus - 210 degrees

#### **Replacement Question**

Redesign a question based on a diagram that is difficult to discern visually.

#### Instead of This



The diagram illustrates the parts of a coal-fired power station. In your science notebook, match the component of the power station to the correct number in the diagram.

- A. Steam turbine
- B. Cooling water
- C. Combustion chamber
- D. Generator
- E. Superheated steam
- F. Transmission lines

(See next page for redesigned question)

#### Try Doing It This Way

What is the purpose of transmission lines at a coal-fired power station?

- A. Transmit electricity to the power station.
- B. Transmit electricity to the customers.
- C. Generate electricity.
- D. None of the above.

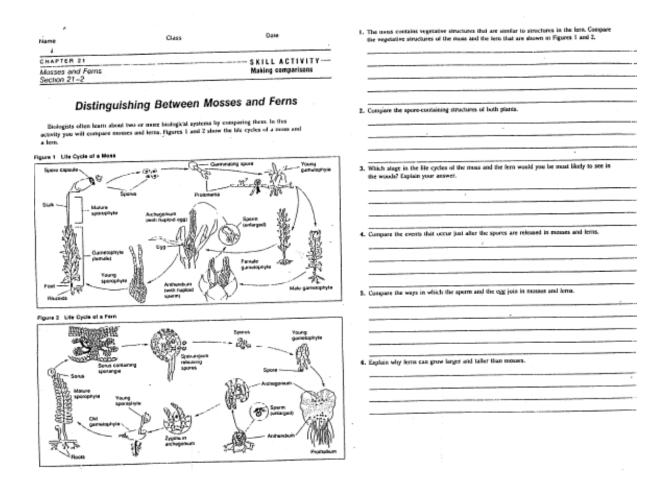
#### Or this Way

In a short paragraph explain the purpose(s) of transmission lines at a coal-fired power station?

#### **Diagrams and Illustrations** Example 1

### Remove extraneous information and visuals to reduce clutter.

#### Instead of This



(See next page for redesigned question)

#### Try Doing It This Way

# Life Cycle of a Fern Mature sporophyte Sorus containing sporangia Sporangium releasing spores Young gametophyte Prothallium (antheridium & archegonium) Zygote in Archegonium Old gametophyte (with young sporophyte)

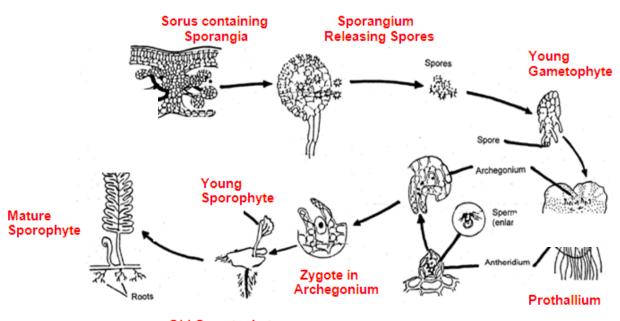
# <u>Diagrams and Illustrations</u> Example 2 Increase size, clarity and add colour to the diagram Instead of This

#### Life Cycle of a Fern

Piame	Class	Date	<ol> <li>The mass contains vegetative structures that are similar to structures in the fers. Compare the vegetative structures of the mose and the tern that are shown in Figures 1 and 2.</li> </ol>
CHAPTER 21 Masses and Forns Section 21-2		Making comparisons	
	ishing Between Mo	comparing them. In this	2. Conspare the spore-containing structures of both plants.
Figure 1 Life Cycle of a Moss	- G - G	Transpipe Carmanyon	<ol> <li>Which stage in the life cycles of the moss and the fern would you be must likely to see in the woods? Explain your answer.</li> </ol>
State - Sportphyte	Achegonus (self-lisphod ogg)	Saure Warrend	
- Camerophy pamaket	N. YYY	Tanasa Andrews	<ol> <li>Cumpare the events that occur (and after the spores are released in mouses and lems.</li> </ol>
Post Line Special	handen ()	Make gametophyte	<ol> <li>Compare the ways in which the aperm and the cage join in mosses and ferm.</li> </ol>
Figure 2: Life Cycle of a Pern	(184)s	Speed Touring garacterists	
Sons or sportings		Son M	Englain why ferm can grow larger and tailer than mosaes.
SAN sterobakes A		Sporm Automobiles  Automobiles  Proposition	

(See next page for redesigned question)

## Try Doing It This Way (print in colour) Life Cycle of a Fern



**Old Gametophyte** 

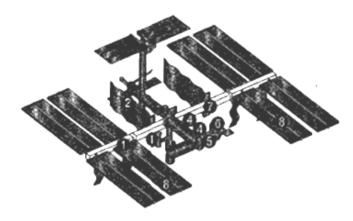
#### **Pictures and Photographs**

#### Redesign the question to include picture and diagram information.

#### Instead of This

Study the diagram of the International Space Station, then answer the following questions:

- A. What section is probably solar collectors?
- B. Where are laboratory tests done?
- C. Where does the crew sleep?
- D. Where should technicians make any repairs
- E. Name two countries involved.
- 1 Research Modules 5 Logistics Module 2 Service Module (behind) 6 Experiment Module 7 Accomodation Module 8 Solar Arrays

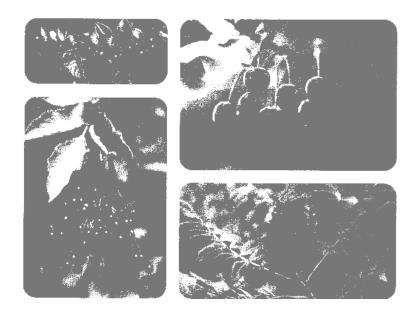


#### Try Doing It This Way

- 1. Where are the solar collectors located?
  - A. Service Module
  - B. Solar Arrays
  - C. Lab Module
  - D. Logistics Module
  - E. Experiment Module
- 2. Where are the laboratory tests completed?
  - A. Research Modules
  - B. Lab Modules
  - C. Accommodation Module
  - D. Experiment Module
  - E. None of the above

#### **Photographs**

#### Instead of This



*Try Doing It This Way* (print in colour using original photos)

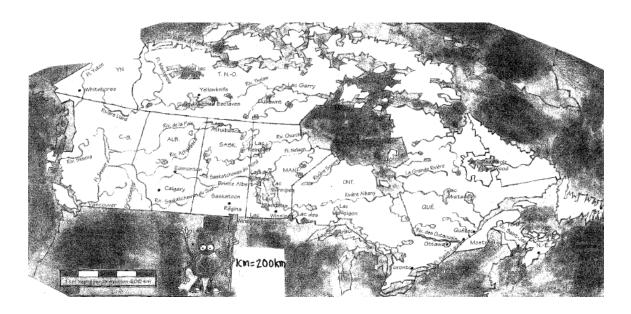


#### **Humanities**

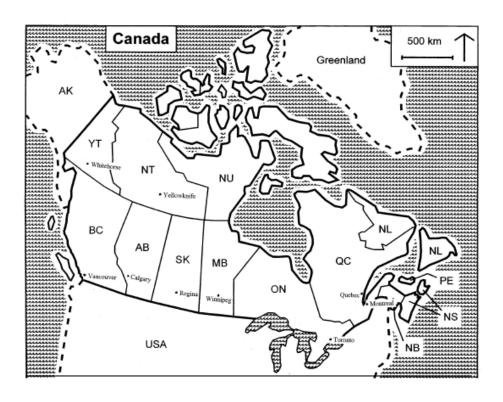
#### Maps Example 1

Use simple outline maps with only relevant information.

#### Instead of This

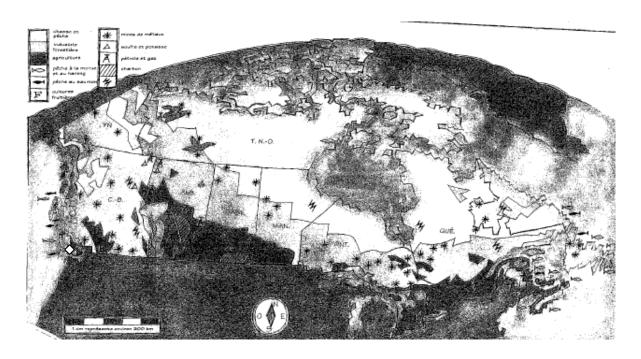


#### Try Doing It This Way

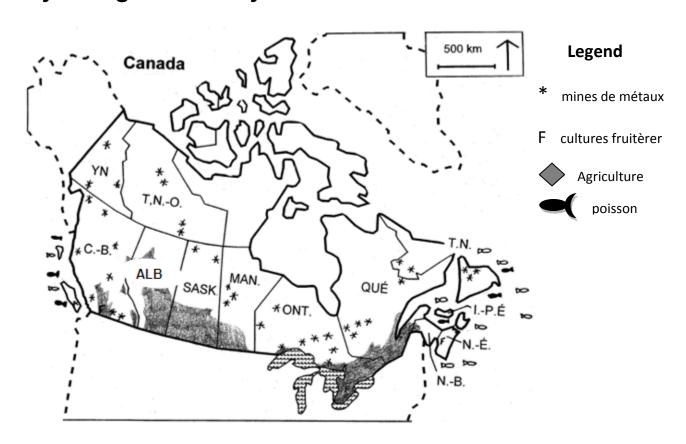


#### Maps Example 2

#### Instead of This



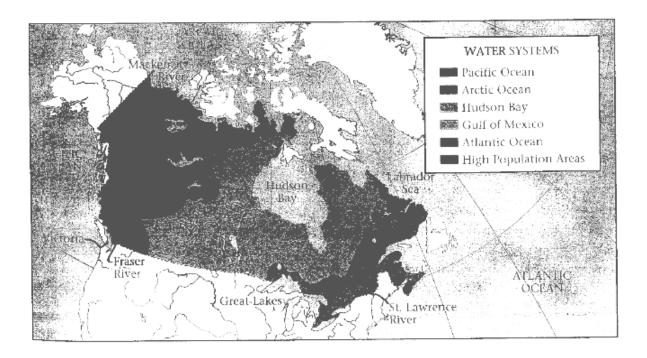
#### Try Doing It This Way



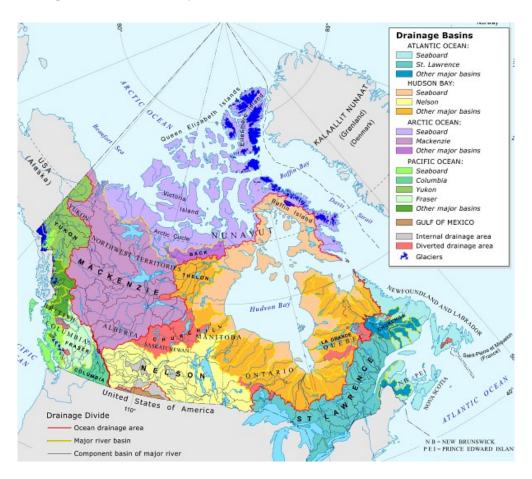
#### Maps Example 3

#### Substitute with a clearer and coloured map.

#### Instead of This



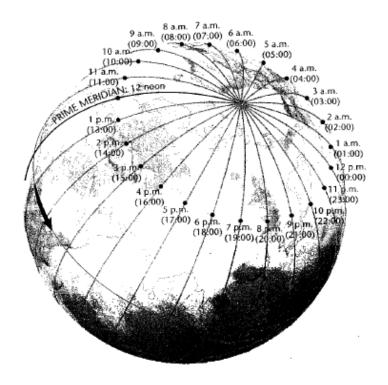
#### Try Doing It This Way (print in colour)



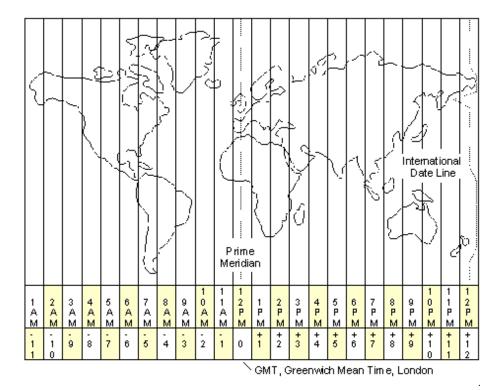
#### **Graphics**

Replace the graphic from a 3-D to a linear, clearer and less cluttered format.

#### Instead of This



#### Try Doing It This Way

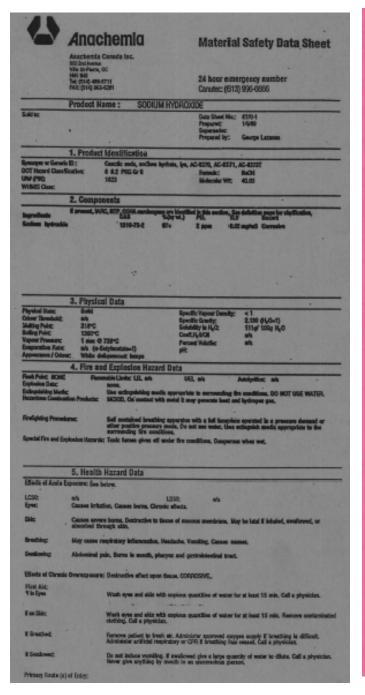


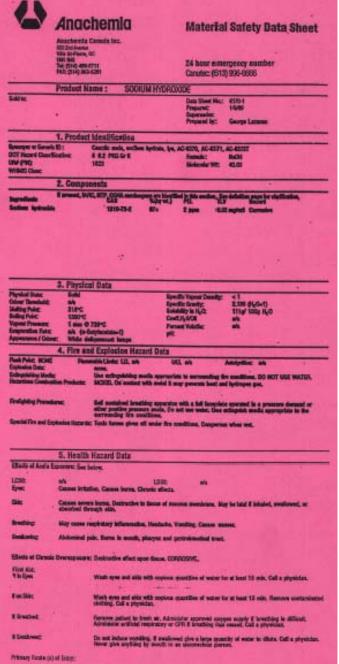
#### **Coloured Paper**

Avoid using coloured paper – Photocopying materials which has a coloured background results in a grey background and poor contrast. Use white or cream background originals only.

Photocopied (dark grey)

**Original (pink)** 





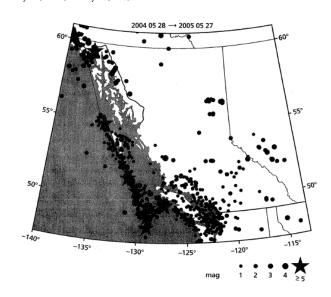
#### **Contrast and Clarity**

## Use of colour improves the ability to distinguish items.

#### Instead of This

#### Earthquakes in British Columbia Over a One-Year Period

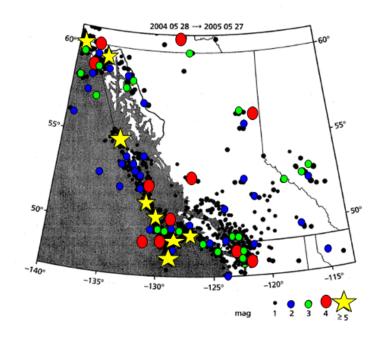
The following map shows the locations of earthquakes in British Columbia from May 28, 2004, to May 27, 2005.



#### Try Doing It This Way (print in colour)

#### Earthquakes in British Columbia Over a One-Year Period

The following map shows the locations of earthquakes in British Columbia from May 28, 2004, to May 27, 2005.



#### Retype document that has small, blurry, filled-in letters, with spotted background.

#### Instead of This

#### More Subordinate Clause Exercises

Underline the main bare subject and circle the main bare predicate and square bracket the subordinate clauses. (For extra practise small bracket the prepositional phrases.)

- Everything turned out as the fortune-teller had predicted.
- As I am a poor man, I cannot buy tickets for the sweepstakes.
- The students watched attentively while the mathematics professor completed the proof on the blackboard.
- 4. The soldier realized that the enemy was approaching.
- It amazes me that the convict made his escape so easily.
- 6. The figure skater realized that her blunder would cost her several points. - ಇದರ ಗಾರ ಕೆಟ್ಸ್ ಗರಿ ನಾರ್ಗ್ ಕರ್ಲಿತಿಗಳು ಕ್ರಾನ್ಸ್ ಕ್ರಾನ್ಸ್ ಕ್ರಿಸ್ ಪ್ರತಿಗಳು ಕ್ರಾನ್ಸ್ ಕ್ರಿಸ್ ಪ್ರತಿಗಳು ಪ್ರತಿಗಳು ಪ್ರ
- 7. The postman noticed that the door had been nainted valley.

#### Try Doing It This Way

#### **More Subordinate Clause Exercises**

Underline the main bare subject and circle the main bare predicate and square bracket the subordinate clauses. (For extra practice small bracket the prepositional phrases.)

- 1. Everything turned out as the fortune-teller had predicted.
- 2. As I am a poor man, I cannot buy tickets for the sweepstakes.
- 3. The students watched attentively while the mathematics professor completed the proof on the blackboard.
- 4. The soldier realized that the enemy was approaching.
- 5. It amazes me that the convict made his escape so easily.
- 6. The figure skater realized that her blunder would cost her several points.
- 7. The postman noticed that the door had been painted yellow.

The words and letters are blurry and difficult to read. More space is required to answer question.

#### Instead of This

<ol><li>Write a pronoun above each of the <u>underligned</u> sentences.</li></ol>	words or phrases in these
a) <u>Term</u> asked <u>Dad</u> to pass the <u>potatoes</u>	
b) Sue and Mary took the puppy on the trip.	
6. Use we or us in each blank.	
a) May make some popcorn? b) Is it time for to go home? c) It was fun for to sleep in the tent.	
Try Doing It This Way	
5. Write a pronoun above each of the phrases in these sentences.	underlined words or
a) <u>Terri</u> asked <u>Dad</u> to pass the <u>potatoe</u>	<u>es</u>
b) Sue and Mary took the puppy on the	e trip.
6. Use <b>we</b> or <b>us</b> in each blank.	
a) May	make some popcorn?
b) Is it time for	to go home?
c) It is fun for	to sleep in the tent

		Nom et # :					
	Quiz de verbes						
Conjugue les verbes suivants	. N'oublie pas de mettre les p	manmo nerenanelo (le tu li					
rous, vous, ils).		Controlled and State of the Control					
		9					
être	avoir	aimer					
		The state of the s					
		han an are					
aller	faire	finir					
onjugue le verbe au présent	de l'Indicatif						
1. Nous	des amies depuis longtemp	os. (avoir)					
<ol> <li>La soupe</li> </ol>	lentement. (mijoter)						
3. Jeun	ne auto bleue. (choisir) faire de l'exercion même salaire. (faire)						
Ma mère et moi	faire de l'exercic	ce ensemble. (aller)					
b. Iule	mëme salaire. (faire)						
	bituellement leurs assiettes						
noi. (être)	lle une pers	onne tres importante pot					
	un cadeau à lui offrir. (avo	lab.					
9 Tu di	i fromage pour la pizza. (rå	most)					
40 Mon database	un bon travail. (ac	por)					
11 Je al	enicate comptin (aller)	scompin,					
12 Vous	épicene ce matin. (aller) le ménage. (faire)						
43vous	avant de prendre une décis	ion2 (réfléchír)					
14. Les enfants	au parc tout l'après-						
4.5 Merra	of our providence and because account to be so the	market and Alline of Affrica County					
46. Plusieurs variétés d'a	arbres ta for	ét tropicale. (garnir)					
17. Nous	arbres la for aux Etats onis pour magas	siner. (aller)					
18. Milchei	un effort pour se lever tot	. (taire)					
19. Les employés	du pop-com. (faire	el .					

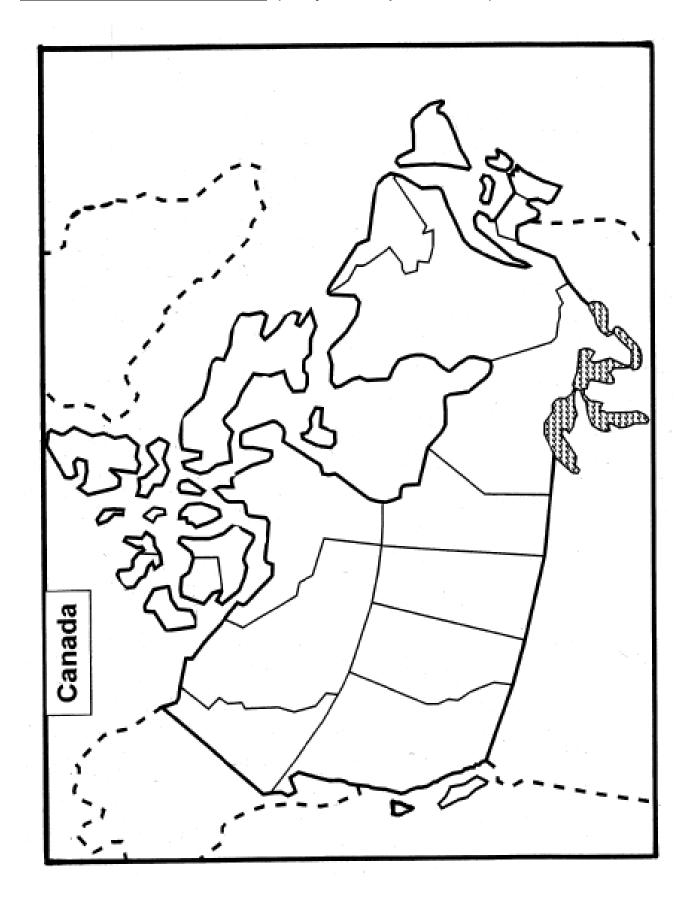
#### et lest la la l'sont l'son

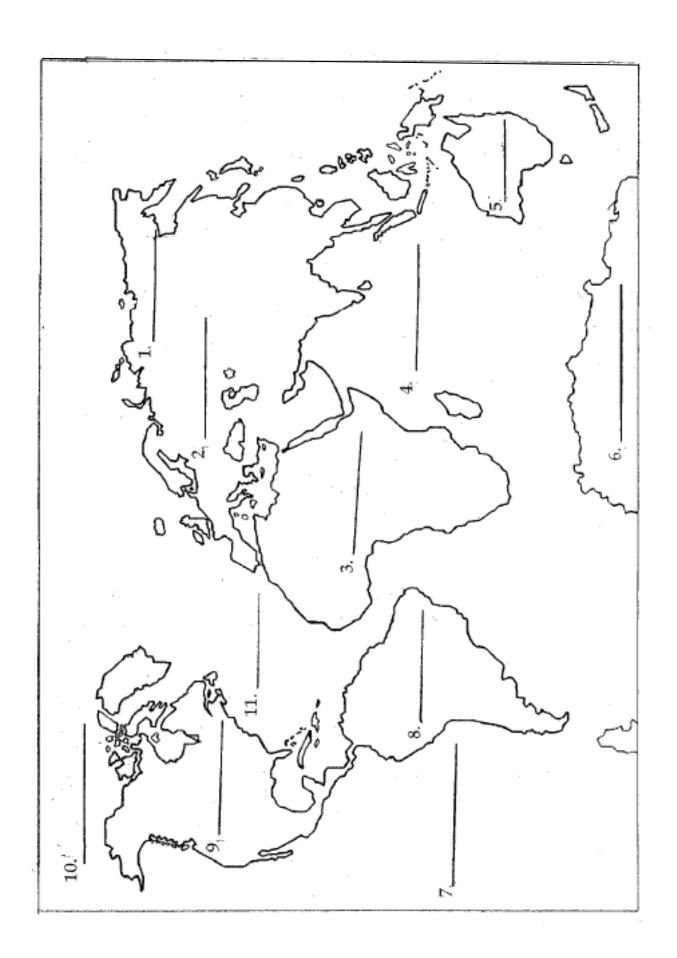
Choisis le bon homophone.

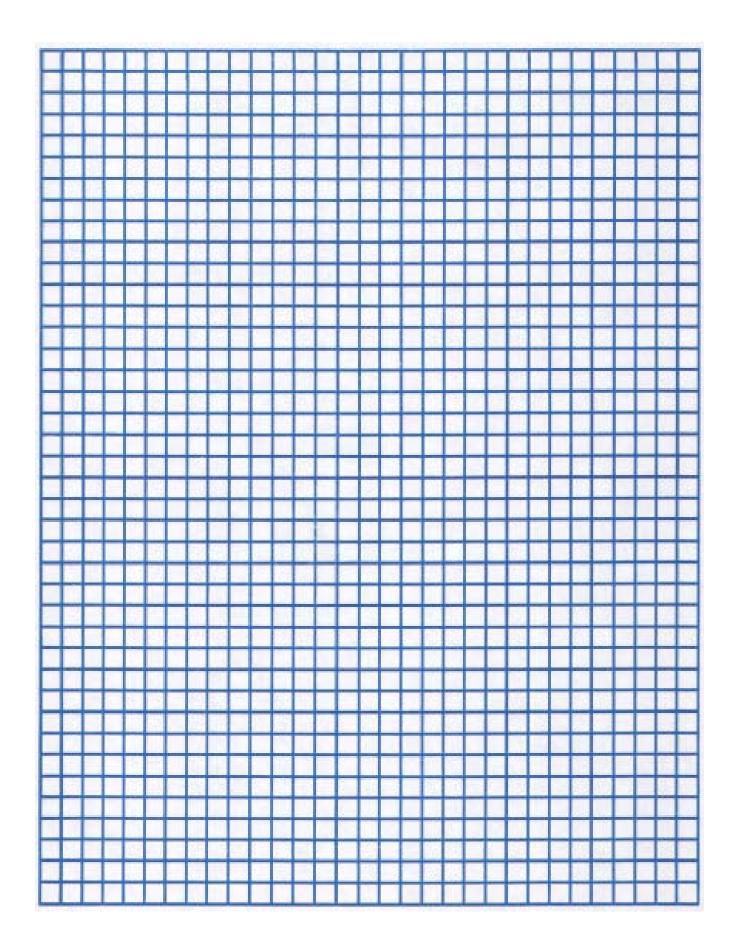
#### La grenouille

33 81 300 3000
La grenouille vit sur la terre (et, est) dans l'eau. Elle saute (à, a)
l'eau lorsqu'il y (à, a) du danger. Avec sa langue gluante, elle capture
les vers de terre (et, est) les insectes. La grenouille est très utile au
fermier, car elle mange les insectes de (sont, son) jardin. Ses pattes
(sont, son) palmées, ce qui lui permet de mieux nager. Ses pattes
arrière (sont, sont) longues pour lui permettre de sauter loin. Sa peau
(et, est, toujours froide. Elle passe l'hiver enfouie dans la boue.
La grenouille pond ses oeufs au printemps. Quand l'oeuf éclot, le tétard sort.
Il (à, æ) la forme d'une goutte d'eau, mais avec des yeux. Le tétard grossit
rapidement. Ses pattes de derrière poussent en premier (et, est)
ensuite se développent ses pattes de devant. C'est la queue de la «goutte d'eau»
qui disparaît en dernier. Quelle (et, est) la différence entre un crapaud
(et, est) une grenouille? La grenouille (à, a)
la peau lisse, de longues pattes (et, est, elle vit
dans l'eau ou tout près. Les crapauds (sont, son)
plus courts avec des petites pattes (et est)
une peau rugueuse.

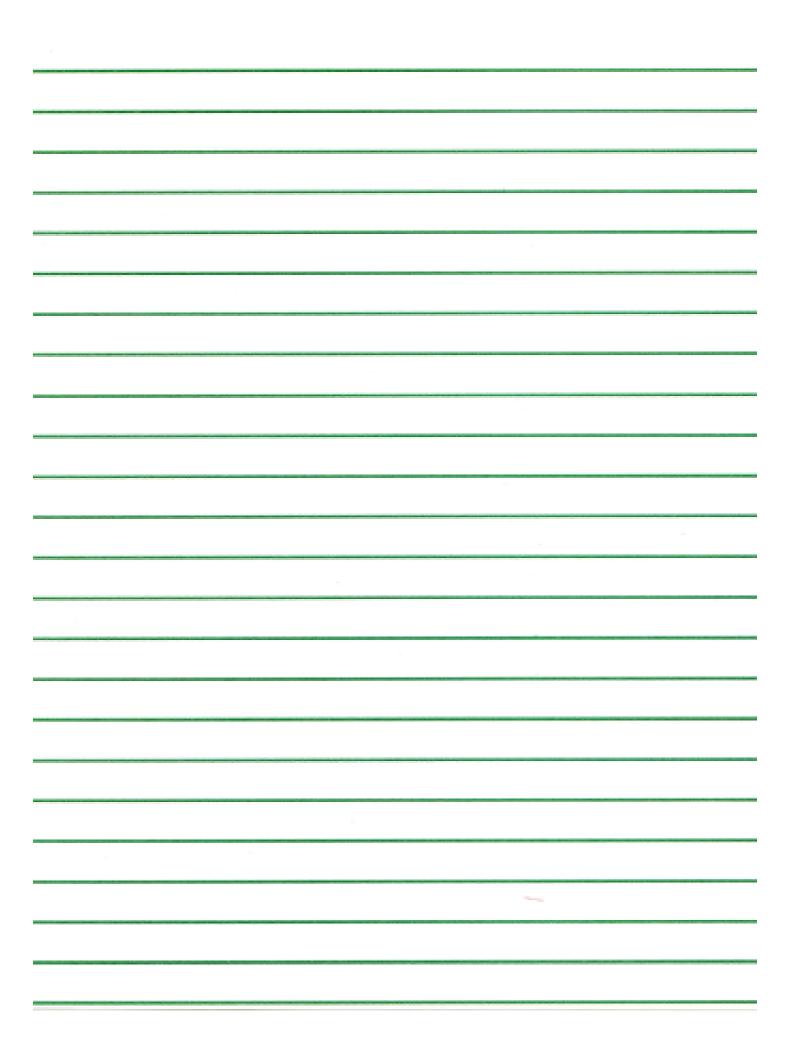
#### **Additional Resources** (may be reproduced)







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#### References:

- BC Ministry of Education Released Provincial Exams
- Classroom Teacher created exams and assessments
- Allman, C. (2004). Making Tests Accessible for Students with Visual Impairments: A Guide for Test Publishers, Test Developers, and State Assessment Personnel. (2<sup>nd</sup> Edition). Louisville, KY: American Printing House for the Blind, Available from <a href="http://www.aph.org.">http://www.aph.org.</a>