

## Gutenberg's Invention Unit Activities I – V

### Gutenberg's Invention Activity I: Showing and Telling

**Subject:** Language Arts/Writing

**Grade Level:** 4<sup>th</sup> grade (adaptable for 3<sup>rd</sup> – 6<sup>th</sup>)

**Purpose:** Students will explore Gutenberg's invention of movable type, including the printing of the Gutenberg Bible, in order to make observations, compare ideas, and express their thoughts through webbing and written products, posters, and art, both electronically and by hand. Through this investigation, students will gain an appreciation of the writing, printing, and decorative illustration process and find inspiration and motivation to publish their own work.

**Materials:** Overhead projector, paper, markers, pencils, and two overhead transparencies made from the images below:

- 1.) Deuteronomy Volume 1, pg. 84r, including illuminations and rubrications.
- 2.) Deuteronomy Volume 1, pg. 084r, with illuminations and rubrications digitally erased.

**Lesson Duration:** 45-60 minutes

**Objectives:**

- ELA 4.11 (A) offer observations, make connections, and speculate (B) compare and contrast ideas
- ELA/Writing 4.18 (D) use adjectives and adverbs to make writing vivid or precise
- ELA 4.25 (A) produce visual images to complement meaning

**Activity:**

- Step 1: *(The teacher is familiar with the Gutenberg Module, but has not introduced it to the class. This is a lesson of discovery.)* The teacher will use the overhead to model a written description of a common object e.g., white board eraser as a **telling** (an eraser) versus a **showing** (a solid black rectangle that is hard on one side, soft and fluffy on the other side and is used to quickly erase marks from the board.) Briefly discuss the benefits of using adjectives and adverbs for richer, more vivid descriptions.
- Step 2: The teacher will put up the transparency of the non-illuminated page from the Gutenberg Bible. Direct the students to think to about what it might be. The students will then write a showing description of what they see. (Some may recognize this as a written page, some not. Let them explore their ideas.) Ask for volunteers to share their descriptions. Do not tell them what it is.
- Step 3: Put up the transparency of the illuminated page and repeat step 2.
- Step 4: Introduce the Gutenberg Bible and lead a brief class discussion about the pages they have seen. Using the overhead, model your own showing description of the pages. Ask the students how the illuminations and rubrications changed their view of what they were seeing.

- Step 5: Have the students create their own illumination. Using a stencil or freehand, the student will draw a large capital letter and color it with markers. Students could draw, for example, the first letter of their name.
- Step 6: Have the students keep their writings and any drawings in a folder. They will visit these items again throughout this unit. You may have them use a folded piece of construction paper and leave it undecorated until the end of the unit. At that time, after studying printing and illuminating, they may have some specific ideas on how to decorate the cover.

**Modifications:** Instead of writing a narrative, showing description, have students use a circle map or other thinking map to record adjectives they associate with the Gutenberg pages (transparencies). Accelerated students may rewrite their description in cursive as a short “compare/contrast” essay and illuminate that particular page.

**Student Product:** All students will produce a non-decorated Gutenberg folder containing their writings and drawings. Display completed unit products as a classroom or library display.

**Closure:** The students will present and briefly discuss their writings and drawings.

**Assessment:** Use a rubric that covers the use of adjectives, two written showings, and a colorful drawing. There are many websites to help you create your own rubrics. Here is one that is free: [http://www.teach-nology.com/web\\_tools/rubrics](http://www.teach-nology.com/web_tools/rubrics)

et cognatione sua et eundem femine de eadem tribu maritos accipiet: ut hereditas permaneat in familijs. Nec sibi miscantur tribus: sed ita maneant ut a domino separate sunt. *Seceruntq; filie salphaad ut sibi fuerat imperatu: et nupserunt malaam et elpha et egla et melcha et noa filijs patru sui de familia manasse q fuit filius ioseph: et possessio q illis fuerat attributa mansit in tribu et familia patris earum. Hec sunt mandata atq; iudicia q mandavit dñs p manu moysi ad filios isrl in campstribus moab supra iordanem contra iherichon.*

*Explicat liber numerorum. Incipit liber deuteronomii. i.*

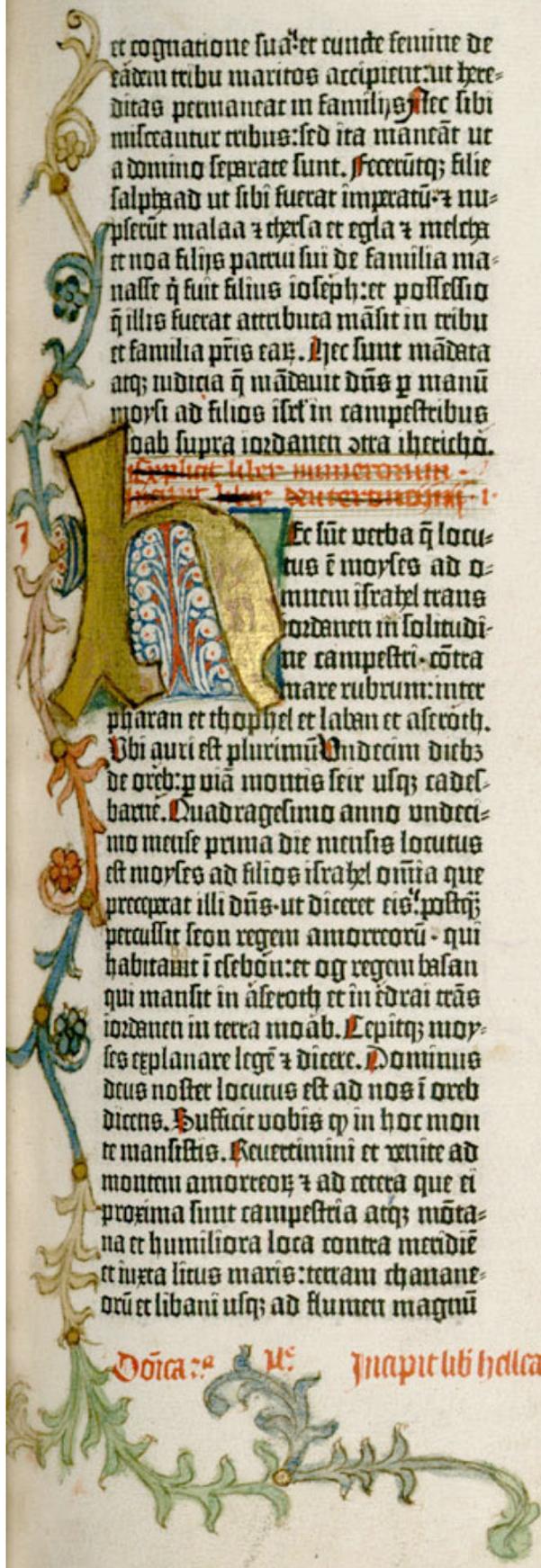
**L**et sunt verba q locutus est moyses ad omnem israhel trans iordanem in solitudine in campstribus contra mare rubrum: inter pharan et thophel et laban et aseroth. *Ubi auri est plurimu. Undecim diebus de oreb: p via montis seir usq; cadesbarne. Quadragesimo anno undecimo mense prima die mensis locutus est moyses ad filios israhel omnia que preceperat illi dñs: ut diceret eis: postq; percussit seon regem amorreoru qui habitavit i sebon: et og regem basan qui mansit in aseroth et in edrai trans iordanem in terra moab. Cepitq; moyses explanare legē et dicere. Dominus deus noster locutus est ad nos i oreb dicens. Sufficit vobis q in hoc monte mansistis. Revertimini et venite ad montem amorreorū: et ad cetera que ei proxima sunt campstria atq; montana et humiliora loca contra meridie et iuxta litus maris: terram chananeoru et libani usq; ad flumen magnū*

eufatecu. *En inquit tradidi vobis. Ingreddimini et possidete eam. sup qua iuravit dñs patribus vris abraham ysaac et iacob: ut daret illam eis et semini eorum post eos. Dixq; vobis illo in tempore. Non possum solus sustinere vos quia dñs deus noster multiplicavit vos: et estis hodie sicut stelle celi plurimi. Dominus deus patrum vrorū addat ad hunc numerū multa milia: et benedicat vobis sicut locutus est. Non valto solus negocia vestra sustinere et pondus et iurgia. Date et vobis viros sapientes et graves quorū cōversatio sit probata in tribubus vris: ut ponam eos vobis principes. Tunc respondistis michi. Bona res est quā vis facere. Tulq; de tribubus vris viros sapientes et nobiles et constitui eos principes tribubus et centuriones et quinquagenarios ac decanos: qui docerēt vos singula. Precepiq; eis dicens. Audite illos: et quod iustū est iudicate. Siue cuius sit ille siue peregrinus: nulla erit distantia psonarū. Ita parū audietis ut magnū: nec accipietis cuiusq; psonam: quia dei iudiciū est. Quod si difficile vobis visum aliquid fuerit referte ad me: et ego audia. Precepiq; omnia que facere deberetis. Profectiq; de oreb transivimus p heremū terribilem et maximam solitudinē quā vidistis per viam montis amorre: sicut preceperat dñs deus noster nobis. Cūq; venissemus in cadesbarne dixi vobis. Venistis ad montē amorreū: quē dñs deus noster daturus est vobis. Vide terram quā dominus deus tuus dabit tibi. Ascende et posside eam: sicut locutus est dñs deus noster patribus tuis. Noli timere: nec quicq; paucas. Et accessistis ad me omnes atq; dixistis. Mittamus*

ii.

iii.

*Doica: 2. Incipit ubi dicitur abar ibe deuteronomii*



et cognatione sua et cuncte femine de eadem tribu maritos accipient ut hereditas permaneat in familiis. Nec sibi miscantur tribus sed ita maneat ut a domino separate sunt. feceruntq; filie salphaad ut sibi fuerat imperatu et nupsent malaa et thesa et eglia et melcha et noa filijs partu sui de familia manasse q; fuit filius ioseph et possessio q; illis fuerat attributa manit in tribu et familia pris eal. Nec sunt madata atq; iudicia q; madavit dñs p manu moysi ad filios isrl in campestribus moab supra iordanem extra ihericho

Et sunt verba q; locutus e moyses ad omnem israhel trans iordanem in solitudine campestri cotea mare rubrum inter pharan et thophel et laban et aseroth. Ubi auri est plurimu. Undecim diebus de oreb p via montis seir usq; cadesbarne. Quadragesimo anno undecimo mense prima die mensis locutus est moyses ad filios israhel omnia que preceperat illi dñs ut diceret eis postq; percussit seon regem amorreoru qui habitavit i esebon et og regem basan qui mansit in aseroth et in edrai tras iordanem in terra moab. Cepitq; moyses explanare lege et dicere Dominus deus noster locutus est ad nos i oreb dicens Sufficit vobis q; in hoc monte mansistis. Revertimini et venite ad montem amorreor; et ad cetera que ei proxima sunt campestria atq; notana et humiliora loca contra meridie et iuxta latus maris terram chananeoru et libani usq; ad flumen magnu

rufeatem. Tu inquit tradidi vobis Ingreddimini et possidete ea sup qua iuravit dñs patrib; vris abraham ysaac et iacob ut daret illam eis et feminerorun post eos. Dixiq; vobis illo in tempore Non possum solus sustinere vos quia dñs de nostre multiplicavit vos et estis hodie sicut stelle celi plurimi. Dominus deus patru vror; addat ad hunc numer; multa milia et benedicat vobis sicut locutus e. Non valeo solus negotia vestra sustinere et pondus et iurgia. Date et vobis viros sapientes et gnaros quor; conversatio sit probata in tribub; vris ut ponam eos vobis principes. Tunc respondit michi Bona res est qua vis facere. Tuliq; de tribub; vris viros sapientes et nobiles et constitui eos principes tribunos et centuriones et quinquagenarios ac decanos qui doceret vos singula. Precepitq; eis dicens Audite illos et quod iustu e iudicate. Siue cuius sit ille siue peregrinus nulla erit distantia psonaru. Ita parum audietis ut magnu nec accipietis cuiusq; psonam quia dei iudiciu e. Quod si difficile vobis visum aliquid fuerit referte ad me et ego audia. Precepitq; omnia que facere deberetis. Profectiq; de oreb transiimus p herenu terribilem et maximam solitudinem qua vidistis per viam montis amorrei sicut preceperat dñs de nostre nobis. Qu; venissemus in cadesbarne dixi vobis Venistis ad montem amorrei que dicitur deus noster daturus e vobis. Vide terram qua dominus deus tuus dabit tibi. Ascende et posside ea sicut locutus e dñs deus noster pribus tuis. Nolite me nec quicq; paucas. Et accessistis ad me omes atq; dixistis. Mutamu

## Gutenberg's Invention Activity II: Investigation and Reflection

**Subject:** Language Arts/Writing

**Grade Level:** 4<sup>th</sup> grade

**Purpose:** Much more exciting than using the dictionary, the students will surely enjoy using the Gutenberg module to broaden their use of investigative and research strategies.

**Materials:** Computer with Internet access and a word processing program

**Lesson Duration:** 45-60 minutes

**Objectives:**

- Technology 126.5 Acquires electronic information including the Internet, for research and resource sharing
- ELA 4.9 C, E Vocabulary development using multiple aids and study word meaning across curricular content areas
- ELA 4.19 A-I Writing processes including use of available technology and refining selected pieces for publication

**Activity:**

- Step 1: The teacher will review Gutenberg and activate any prior knowledge of printing presses. The class will briefly discuss Gutenberg, his invention of the printing press, and make a class chart with basic facts and descriptions. Add to this chart throughout the unit.
- Step2: Working in pairs, the students will investigate the images found in the Gutenberg module and develop their own definition of a printing press. The following links can be book marked for easier access. <http://www.hrc.utexas.edu/exhibitions/education/modules/gutenberg/books/printing> or <http://www.hrc.utexas.edu/exhibitions/education/modules/gutenberg/invention/printshop>
- Step3: With their partners, the students will discuss the findings of their research, refine their definition, and using a word processing program (such as Microsoft Word or Appleworks), compose an electronic document with their definition, including a copy and paste image of a printing press from the module.

**Modifications:** The struggling student may benefit from peer assistance for his or her electronic document or present findings orally with a display of a thinking map. The advanced student may include research from other websites and include more than one type of press.

**Student Product:** An electronically produced document with narrative and picture (or modified version)

**Closure:** The students will electronically save their document to a file on the computer, print one copy for their Gutenberg folder, and print one for display on the Gutenberg wall next to the class-generated chart of facts. Students may add new facts to the chart.

**Assessment:** Writing projects are often best assessed using a rubric. There are many websites to help you create your own rubrics, here is one that is free: [http://www.teach-nology.com/web\\_tools/rubrics](http://www.teach-nology.com/web_tools/rubrics)

**Extension:** As your Gutenberg display area grows, have the students act as docents and give tours to other classes or administrators.

### **Gutenberg's Invention Activity III: Critical Thinking**

**Subject:** Language Arts/Writing

**Grade Level:** 4<sup>th</sup> grade

**Purpose:** Students are motivated to write when asked to express their own views and ideas.

**Materials:** Computer with Internet access and a word processing program

**Lesson Duration:** 45-60 minutes

**Objectives:**

- ELA 4.15 A-E The student writes for a variety of purposes and in a variety of forms.
- ELA 4.16 A, B The student writes legibly in cursive and manuscript, composes original texts, and applies conventions.
- ELA 4.19 A-I The student uses writing processes including use of available technology and refining selected pieces for publication.

**Activity:**

- Step 1: Working in pairs, the students will investigate the Gutenberg Education Module to answer the questions below in Step 2. Make sure the students understand how to navigate the site and click on the links under the headings: **The Invention** and **Books Before and After the Gutenberg Bible**.
- Step2: Working with their partners or in small groups, the students will create a poster with pictures and paragraphs responding to one of the following questions:

How has printing changed from Gutenberg's time to our own modern time? If the printing press were just invented today, what would people want printed? (*What would be important enough to print?*)

**Modifications:** Struggling students have a shortened writing assignment (for example: Describe a modern printer or draw and label a picture of something you would want to print.) Advanced students may present their findings with a media project such as a PowerPoint presentation.

**Student Project:** A finished poster answering the questions: (1) How has printing changed from Gutenberg's time to our own modern time? (2) If the printing press were just invented today, what would people want printed?

**Closure:** The students will electronically save their documents to a file on the computer, print one copy for their Gutenberg folder, and print one for the Gutenberg classroom or library display

**Extended Time:** Students may need additional time. Teachers and students are encouraged to finish this project within one additional class period.

**Assessment:** Use a rubric or have the students critique each poster as a class.

### **Gutenberg's Invention Activity IV: Hand-Painted Additions**

**Subject:** Language Arts/Writing

**Grade Level:** 4<sup>th</sup> grade

**Purpose:** Personalizing written work with the addition of illuminations and rubrications adds value to the piece both in the author's eyes and from the view of the public. Students will take pride in their writing and gain motivation to publish their work.

**Materials:** Computer with Internet access and a word processing program, markers

**Lesson Duration:** 45-60 minutes

**Objectives:**

- ELA 4.23A The student will describe how illustrators' choice of style and media help to represent or extend the text's meaning.
- ELA 4.25A Select, organize, and produce visual images to complement meaning.

**Activity:**

- Step 1: The student must choose a completed essay for illuminating. The teacher may have them choose an essay or poem from their writing folder, or perhaps the teacher will have the students use the ideas in part III to write an essay. The topic of printing from medieval times to modern times would make for an effective compare/contrast essay. This lesson will focus on illuminating the piece to ready it for publication (Gutenberg classroom or library display).
- Step 2: With guidance (and after modeling from the teacher), students will discuss how a written work could be illuminated/rubricated to extend the text's meaning or simply for aesthetic purposes.
- Step 3: The student will organize the layout of the page to include space for the illuminations and decide whether the finished product will be done in manuscript or with a word processing program. Like the non-decorated transparency used in part 1, the student must design the page with space allotted for rubrication and illumination.
- Step 4: With a particular layout in mind, the student will rewrite the chosen document either as a manuscript (handwritten) or using an interesting font with the word processor.

- **Step:** Finally the student will add the illuminations and rubrications, making it ready for publication on the Gutenberg display.

**Modifications:** The struggling student may copy a passage onto the computer or have a peer tutor assist with an original, dictated piece. The student will then print it out and add illuminations. The advanced student may want to try handwriting the essay using calligraphy.

**Student Project:** A written document, illuminated and ready for publication.

**Closure:** The students will present their work to the class.

**Assessment:** The rubric should include the essay – ideas, organization, voice, conventions, and the illumination and rubrication.

**Extension:** Early finishers may choose to illuminate another original piece of writing.

### **Gutenberg’s Invention Activity V: Making a Book**

**Subject:** Language Arts/Writing

**Grade Level:** 4<sup>th</sup> grade

**Purpose:** The students each create their own antique book and gain an appreciation for writing when they see their own work displayed in an attractive manner and know that it is worthy of publication. The books made in this last lesson may be added to and used throughout the school year.

**Materials:** Cardboard 10” x 14”, tempura paint, large rubber bands – 3 per student, 6 pieces of unlined paper, tea bags, glue, and decorating materials such as buttons, material scraps, ribbon, sequins, glitter, or copied pictures from the Gutenberg module.

**Lesson Duration:** 45 minutes

**Objectives:**

- ELA 4.15 A-F The student writes for a variety of purposes and in a variety of formats.
- Art 4.2 The student expresses ideas through original artworks, using a variety of media.

**Activity:**

- **Step 1:** Have the students lay down newspaper and wear aprons – this may get a little messy. Each group of 4 students needs a tea bag that is soaked in 8-10 oz of warm water. Use the tea to “stain” the paper. Apply it with a sponge or paintbrush and use only a small amount at a time and cover front and back. The paper does not need to be soaked.
- **Step 2:** When the paper is dry, crumple it up and then spread it out flat again. The tea stain and crumpling of the paper “ages” it. Put the paper out of the way during the next steps.

- Step 3: The cardboard should be bigger than the paper, about 10 x 14 if the paper is a standard size 8 x 11. Fold the cardboard hamburger style – this will become the book cover. After bending, paint the cardboard and let it dry.
- Step 4: Decorate the cover inside and out using scraps of material, pictures, buttons or any item the student may choose. Let it dry thoroughly.
- Step 5: Fold the tea-stained paper hamburger style and place the 6 pieces in 3 groups of two. Each 2 piece, when folded makes 4 book pages. Rubber-band each pair to the book cover along its fold. The book now has 12 pages. You may add more pages later if you wish.
- Step 6: This book can be used for many things, but in keeping with this unit, it is suggested that it be used for the publishing of original works. Students may take a finished writing piece (e.g. poetry or essays) and either copy it directly in the book, or to avoid error, print it using a word processor, cut it down to size, then glue it on the tea stained page.

**Modifications:** The struggling student may require peer assistance but should be encouraged to express his/her own artistic flair.

**Student Project:** An “antique” book for publishing original work.

**Closure:** The students will print one of their own pieces of written work and glue it onto the first page of their book.

**Assessment:** The rubric should include group behavior, creative design, and selection of written work.

**Extension:** The books, along with the other products from this unit, need to be displayed so that the students see their work being admired by others. This would make a nice display for the classroom, the library, or a school function. Have the students act as docents and give guided tours of their “exhibits.”

**Unit Activities by:**

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\*\* Questions, comments or pictures of your student’s work may be sent to me via email.

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