

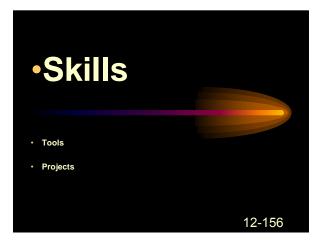


How have you succeeded in fostering creativity, critical thinking and innovation, while also meeting curricular objectives?

10-156

#### Marc Prensky, , writes

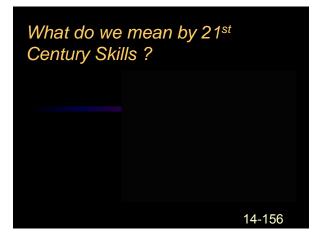
"Our teaching should instead focus on the verbs (i.e. skills) students need to master, ...that learning depends on skills instead of tools....



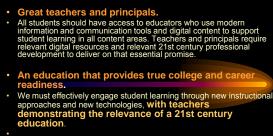
A. 21st Century Skills --- How much (if any) of our curriculum is centered on authentic problem-solving, teamwork and information literacy? According to this article, the <u>New Commission on the</u> <u>Skills of the American Workforce</u> which rethinks K-12 education to help students be successful in the global economy.

- B. Skills for success: So what skills do employers seek in their graduate recruits? There are some capabilities commonly valued by most graduate employers. Academic achievement is obviously important, but it is not everything. Core skills which employers see include:
- C. The **Partnership for 21st Century Skills** is a national organization that advocates for 21st century readiness for every organiza student.
- C. I.S.T.E. NETS (National Educational Technology Standards) Administrators - Students - Teachers

13-156

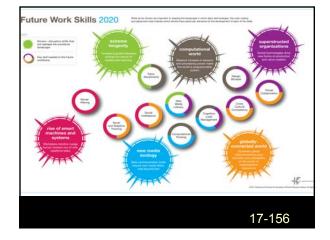


# **ISTE RELEASES 2012 U.S. EDUCATION TECHNOLOGY PRIORITIES** (ISTE) today released its policy priorities for 2012 identifying the top three essentials we believe every student should have. 15-156



- Access to broadband, both at school and at home. We must continue our national commitment to closing the digital divide and ensure that all students have access to affordable broadband in their classrooms and at home.

16-156

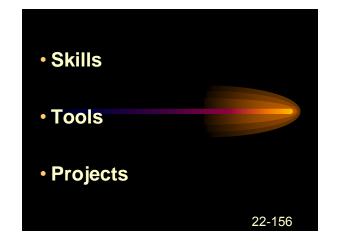


#### 10 Important Skills Students need for the Future

- Research by the Institute for the Future
- Report entitled <u>"Future Work Skills 2020"</u>
- Preparing for a specific career area based on content is difficult
- Students should be developing certain broad skills.
- Skills are important for our students to learn.
- Explains each of the skills in detail, and also goes into the implications for education and policies.

10 Tech Skills Every Student Should Have Sense-making. Ability to determine the de eper meaning or significance of what is being expressed al intelligence. to connect to others in a deep and direct way, to sense and stimulate reactions and desired ity to co • 1. Internet Search and adaptive thinking. ency at thinking and coming up with solutions and responses beyond that which is rote or rule-• 2. Office Suite Skills • 3. Self learning of tech & where to go for help ral competency. operate in different cultural settings 4. Typing - yes, typing 5. Social Media ional thinking. to translate vast am 6. Netiquette - Internet/Email/Social Media 7. Security and Safety dia literacy assess and develop content that uses new media forms and to leverage these 8. Hardware basics and troubleshooting disciplinarity. y in and ability to understand concepts across multiple disciplines 9. Backup data 10. Finding apps and software n mind-set. to represent and develop tasks and work processes for desired outcome By David Andrade titve load management.
billity to discriminate and filter information for importance and to understand how to maximize we functioning using a variety of tools and techniques al collaboration. ability to work productively, drive engagement and demonstrate presence as an gmb 458 virtual 20-156







#### **Building Better Teachers**

- 1. Communications skills (oral-written-presentation)
- 2. Develop "Critical thinking skills"
- 3. Creativity and innovation -"Thinking outside of the box"
- 4. Understands "Creative problem-solving"
- 5. Collect and/or retrieve information (Information Literacy)

Professional development Fosters peer relationships Building 21st century skills - preparing kids for the future Creating global citizens – "Collaboration skills" Provides "Project/Problem Based Learning"

**Building Better Teachers** 

# Develop "Critical thinking skills"

#### Q: What are they?

Q:How do YOU teach critical thinking in your classroom?

http://www.teach-nology.com/worksheets/critical\_t

25-156

### **Critical Thinking Exercises**

 Involves suspending your beliefs to explore and question topics from a "blank page" point of view.

Involves the **ability to know fact** from opinion when exploring a topic.

26-156

#### Critical Thinking Skills A well cultivated critical thinker: raises vital questions assesses relevant information comes to well-reasoned solutions thinks open-mindedly thinks about the implications thinks about practical consequences communicates effectively with others Rely on reason rather than emotion Evaluate a broad range of viewpoints Maintain an open mind to alternative interpretations Accept new evidence, explanations and findings Are willing to reassess information Can put aside personal prejudices and biases Consider all reasonable possibilities Avoid hasty judgments 27-156



# Would you rather....

 Have to learn to walk all over again or learn to write all over again?

• WHY ?

29-156

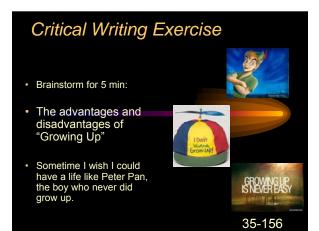
## Would you rather....

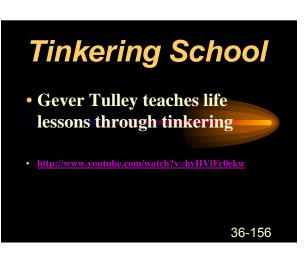
- Get lost in the woods with a knife and no food OR lost in the woods with 4 cans of SPAM , but no knife?
- WHY?



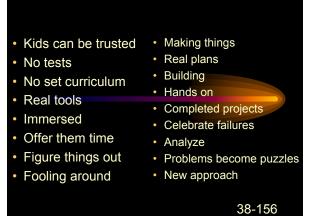


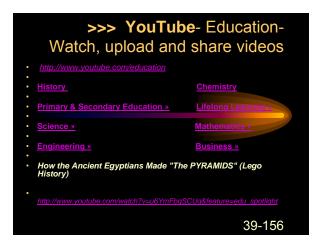
- Thinking Critically About UFOs Recording Available
   Welcome and Introduction to Critical Thinking Recording Available
   Thinking Critically About Amelia Earhart's Disappearance Recording Available
   Thinking Critically About the Attack on Pearl Harbor Recording Available
- Thinking Critically About the Apollo Moon Landings Recording Available

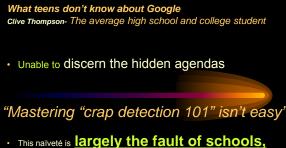




# **Displaying School** • Gever Tulley teaches life lessons through tinkering • http://www.voutube.com/watch?v=hvHViFc0ekw







This naïveté is largely the fault of schools, which rarely teach critical thinking.

#### 40-156

# Critical Thinking -Problem Solving

- <u>http://www.teach-</u> nology.com/worksheets/critical\_thinking/
  - 41-156

Edheads helps students learn through educational games and activities designed to meet state and national standards.

• <u>http://www.edheads.org/</u>







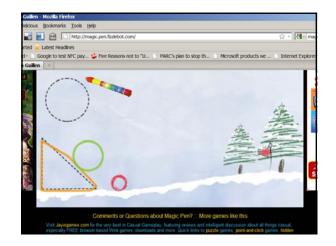






#### <u>MagicPen</u>

- Shapes you draw-affected by three basic principles: gravity, friction, and inertia.
- Physics. Drawn shapes will fall to the ground, bump against each other, and sit still unless acted upon by another moving shape.
- Draw any object you please, but Magic Pen automatically smooths out jagged edges into a more block-like shape. Game is mouse-driven-click and start drawing.
- PLAY: <u>http://jayisgames.com/archives/2008/04/magic\_pen.ph</u>
- Game Instructions http://www.bubblebox.com/play/puzzle/975.htm
- One of the most genius games ever



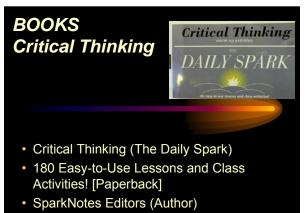






#### Teach Critical Thinking Skills

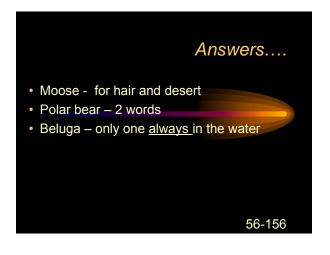
- Study:
- Many college students are not learning to think critically. Many of the students graduated without knowing how to determine fact from opinion.
- Software = Learn how to report and predict the weather at the underground W.H.E.D. weather caves!
- Web site = <u>http://www.edheads.org/</u>
- <u>http://www.edheads.org/activities/weather/indeggh</u>如6

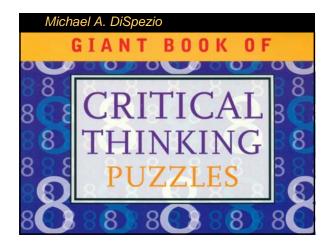


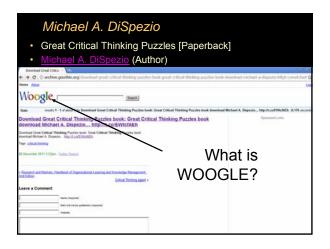
#### BOOKS - Creativity - Critical Thinking - Innovation

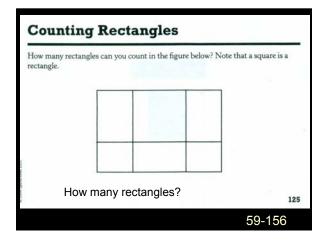
Sample for the book:

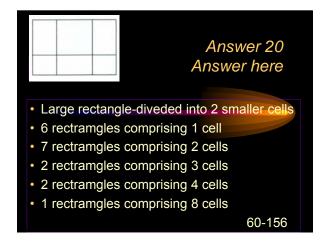
- Which of the following animals does not belong in this list ? WHY?
- Polar bear, Penguin, Beluga, Moose, Walrus, Reindeer
- All can be found in the Artic-EXCEPT Penguins..Penguins can olny be found in the Southern Hemisphere 55-156





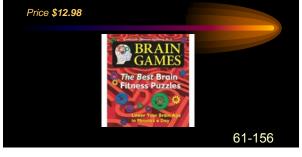


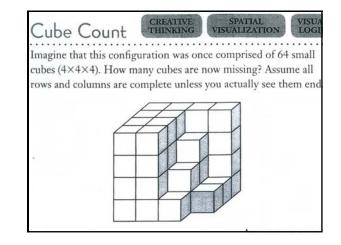


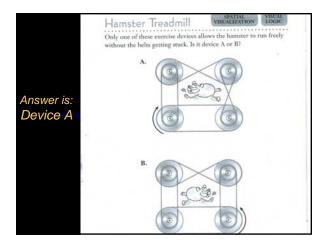


#### Brain Games: The Best Brain Fitness Puzzles [Spiral-bound]

Editors of Publications International Ltd. (Author, Editor)







#### Web 2.0 Drawing Tools for **Every Level**

tallearning.com/blog mark brumley web 20 drawing tools every level

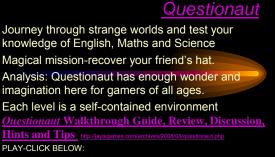
- I want to know if it will..... Q1. Can you save and store the file in the cloud Q2. Can you share the file with others?
- Q3. Can you work with others at the same time as you drawQ4. Can you add your drawing to another site?
- Q5. Can you embed the drawing? Q6. Are there different shapes-pre-defined?
- Q7. Can you draw free-form?
- Q8 Can you import other drawings or jpeg photos?
- Q9. Can you move items around on the pad once you have created them?

#### 64-156

#### • Web 2.0 Drawing Tools for Every Level

- Drawz It
- Queekv
- Queeky is an advanced drawing application suitable for older students. Accounts are required and the basic membership level is free.
- MugTug SketchPad
- Animations, Make Friends| Dolnk.com

#### 65-156





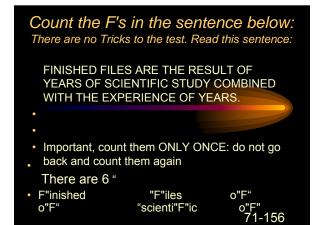
# Questionaut PLAY-CLICK BELOW:

68-156



#### Determine if each statement sounds like a fact or an opinion

- My mom is the best mom on earth. My dad is taller than your dad. My telephone number is difficult to memorize. The deepest part of the ocean is 35,813 feet deep.
- Dogs make better pets than turtles.
- Smoking is bad for your health. Eighty-five percent of all cases of lung cancer in the U.S. are caused by smoking.
- If you flatten and stretch out a Slinky toy it will be 87 feet long.
- Slinky toys are fun. One out of every hundred American citizens is color blind. Two out of ten American citizens are boring.



Free Critical Thinking Worksheets http://www.teach-nology.com/worksheets/critical_thinking/	
<ul> <li><u>Graphic</u> <u>Organizers</u></li> <li><u>Language Arts</u></li> <li><u>Math Worksheets</u></li> <li><u>Science</u></li> <li><u>Social Studies</u></li> <li><u>Holidays</u></li> <li><u>Critical Thinking</u></li> </ul>	<ul> <li>Elementary</li> <li>Research Skills</li> <li>Teacher Templates</li> <li>Theme Worksheets</li> <li>Worksheets Club</li> <li>Instant Worksheet Maker 72-156</li> </ul>

#### Grades **6 – 12** | Student Interactive | Inquiry & Analysis

- Hero's Journey
- Elements of the hero's journey
- Analyze a text
- · Follows the hero's journey pattern
- Start creating a hero story of their own
- iourney-30069.html

# Critical Thinking -Problem Solving

<u>http://www.teach-</u>
 <u>nology.com/worksheets/critical\_thinking/</u>

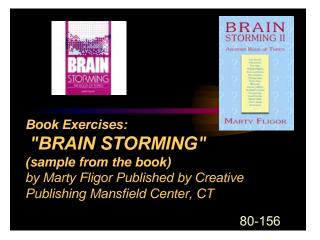














# Where in the world would you find a leaf or leaves?



Practice 3:	Name things that have holes in them.
Practice 4:	Give uses for Velcro
• • Practice 5:	List uses for a balloon
Practice 6:	Give uses for a piece of toast
Practice 7:	Give uses for a windshield wiper
Practice 8:	Give ways to put out dragon's fire
<ul> <li>Practice 9:</li> </ul>	In 1 minute name countries 83-156





85-156

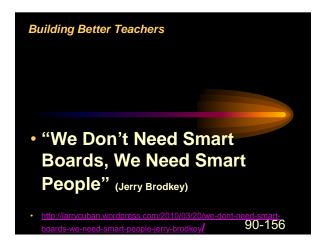








currently in use. It is MUCH cheaper than speed cameras, radar guns, police officers, etc. 89-156



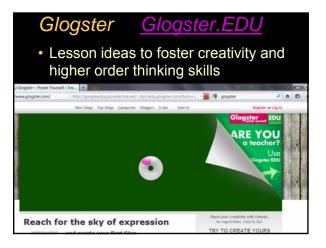












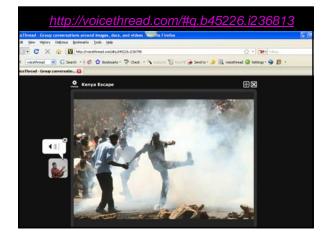














#### **Creative Writing - Communication**

# Storybirds

 Short, visual stories that you make with family and friends to read, share and print.



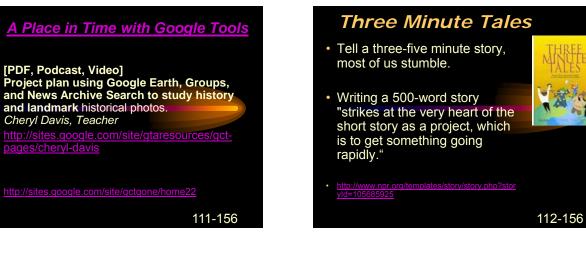












### Sample - 3 minute Stories

 <u>The Little Old Man That Dreamed He</u> Could Fly

Magpie and His Blackberry Pie

113-156

### **Round 6 Stories**

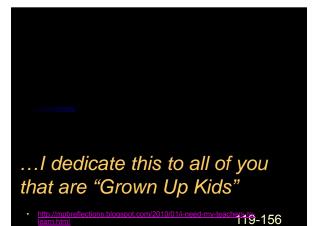
- Send us original works of fiction
- One of the characters tells a joke
- One of the characters cries
- Our Round 6 winner was "A Saint And A Criminal" by Lauri Anderson.
- http://www.npr.org/2011/04/03/133542373/a-saint-and-a-criminal



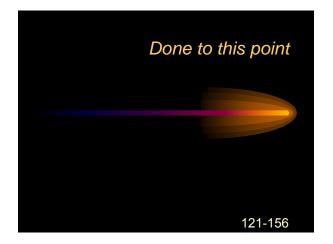


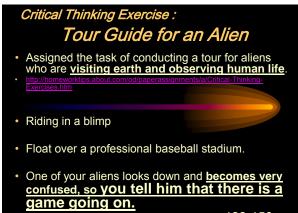








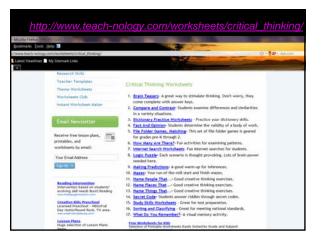




122-156

# Try to answer the following questions for him 1. What is a game? 2. What is a team? 3. Why are there no female players? 4. Why do people get so passionate watching other people play games?

 5. Why can't the people in the seats just go down on the field and join in? 123-156



#### How many times a day does a clock's hands overlap? AM • PM 12:00 • 12:00 1:05 2:11 3:16 4:22 5:27 1:05 2:11 2:11 3:16 4:22 5:27 6:33 7:38 8:44 6:33 7:38 8:44 9:49 9:49 10:55 10:55 125-156

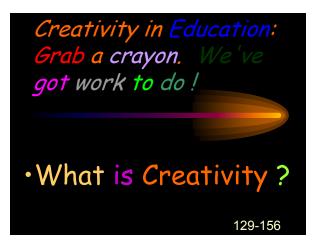
# *My* next trip- Is There A Better Way To Board A Plane?

- I expect that they'll do the standard thing and have us board by "zone numbers" out of a desire to cut down on the time it takes to board so that we get on the plane in an efficient manner.
- But it turns out that the "zone number" system is really poorly thought out.

Why?





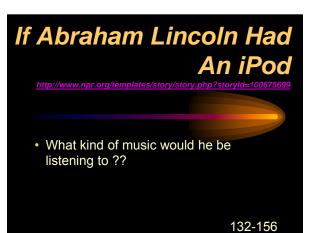


Creativity is inventing, experimenting, growing, taking risks, breaking rules, **making mistakes**, and having fun. - Mary Lou Cook

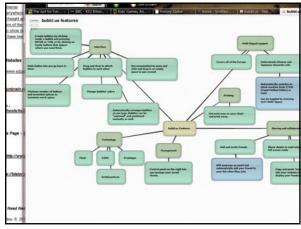
#### 130-156

# Now, reflect on your classrooms...

- What are you doing that is innovative?
- How is what your students learning pertinent to today's world?
- Will what you are teaching your students help them be successful in today's global economy?



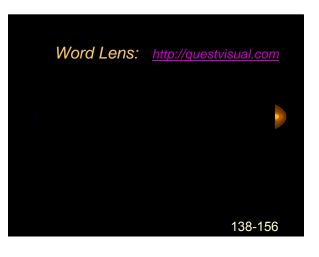












**User Guide** FableVision Learning Animation-ish Classroom Edition User's Guide

Please click on the button below to download the User's Guide PDF.

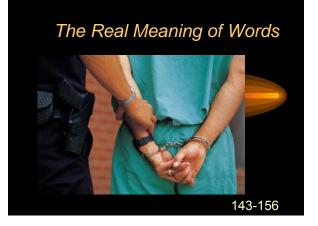
<u>http://www.fablevision.com/pdfs/animationish\_users\_quide.pdf</u>
 139-156

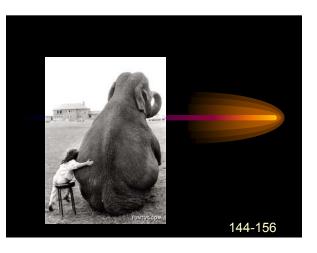
#### Animation-ish - FableVision

- http://www.fablevisionstudios.com/project.php?id=9
- Animate your drawings in minutes.
- Simple-to-use toolsEngaging design
- Multiple levels
- Fun, rewarding experience
  - r un, reward
- Users are led through three optional levels of increasing animation skill. Wiggledoodleish allows the user to draw, trace, and animate with three frames. Flipbook-ish allows the user to create animation using an infinite number of frames and higher-level tool sets. Advanced-ish introduces the mover tool, which allows for more complex animations using foregrounds and backgrounds.



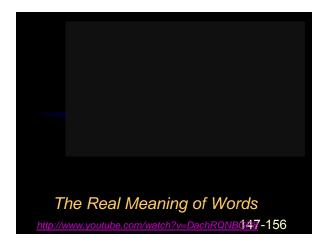


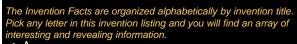










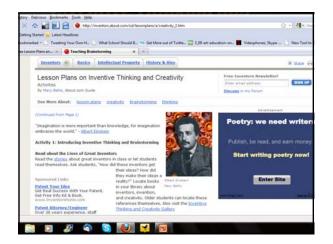


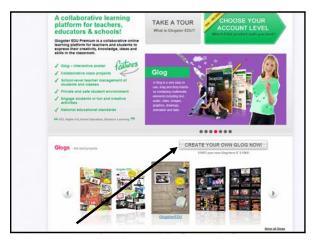
- A InventionInventor

- •
- Adding MachineBlaise Pascal Adding MachineBlaise Pascal Air BrakeGeorge Westinghouse Air ConditionerWillis Haviland Carrier AirplaneWright brothers Airplane EngineCharles Taylor
- •
- .

- Airpiane Engine<u>Charles Taylor</u> Alevanderson alternator<u>Ernst Alexanderson</u> Analytical Engine<u>Charles Babbage</u> Arc Lighting System<u>Charles Brush</u> AspirinFelix HoffmanAssembly LineRansom Olds Atanasoff Berry Computer<u>John Vincent Atanasoff</u> <u>Automobile</u>Karl Benz

- Avon CosmeticsDavid H. McConnell





#### Sample Glogster Projects

- The Moon
- <u>http://tehescmarts.edu.glogster.com</u>
- The 2011 Japan Tsunami
- http://tehescmarts.edu.glogster.com/the-2011-japan-tsunami/?w1
- Picasso
- http://claudiawjohnson.edu.glogster.com/picasso/?w1

#511**51**5156





### MapSkip

- And many of our stories are about places.
- Where we fell in love, had the dream vacation, took that great picture or, well, joined the rebellion.
- Many other places that anchor our lives where we live, eat, work and have fun.
- •
- Exploring the world through shared stories and pictures about all the places in our lives.

154-156

# Zoho Show 3.0

- <u>http://www.zoho.com/show/demo.html</u>
- The all-new Zoho Show 3.0 comes with a rich user interface that lets you create impact, not just presentations. Engage your audience and get your ideas across in a visually appealing way.





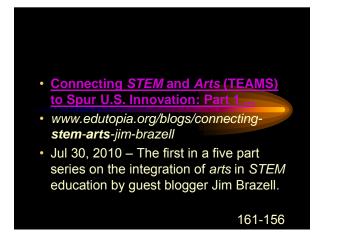
#### App Inventor for Android

- Easiest way to create apps for your phone!
- You do not need to be a developer to build great mobile applications.
- Visually design applications and use blocks to specify application logic

158-156







#### <u>Dolnk</u> **Create Animations** Share with students Art and animation Create your own Do not need to be an artist Online community Users create original works Share ideas Re-use the work of others Post to other social networking sites such as Facebook and YouTube. 162



#### Assignment:

- Attach one or two WORDS MAX to each photo...
- You will work in groups of 3
- Each slide with a photo will appear for 30 seconds
- Be prepared to share your answers with the group

164

# Power of Words - Video

- http://www.youtube.com/watch?v=Hzgzim5m7oU
- This short film illustrates the power of words to radically change your message and your effect upon the world.
- Homage to Historia de un letrero, The Story of a Sign by Alonso Alvarez Barreda Music by: Giles Lamb

165

