

Pro-Vision Academy Charter School

5th – 7th Grade Distance Learning Plan

Technology Applications (5th -7th)

Distance Learning Plan

Week of May 4 - 8, 2020

Technology Activities

TEKS: 3-5.5.A & E, 6.5.C & D

Worksheets are available to edit/submit online if you have a computer- open assignment in Week 5 and save it to your computer. Make sure you save all changes as you work. Once you've completed ALL work for the week you can send the document back to me.

If you do NOT have a computer, you can do ALL work on a separate piece of paper, take a picture and send ALL work to me for the week once you have completed it. I will need to know the page number and problem number you are working on, as well, as your answer (ex: page 7 #1).

Packet / worksheets will be located under Week 5 in my Google Classroom.

****Make sure your FIRST AND LAST NAME is on the FIRST page****

Monday/ Tuesday

Read "The Mysteries of Life with Tim and Toby (Email and IM)" and "Graph, Stats, and Numbers" on pages 1-5.

You will need information from these readings to do the assignments later in the week.

Wednesday/ Thursday

Complete Email and IM worksheet and quiz on pages 6-7.

Remember to use the readings you had on Monday and Tuesday.

Friday

Make sure ALL work has been turned in! You can submit assignments via Google Classroom or email them to kmorin@pvacademy.org.

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The Mysteries of Life with Tim and Moby (Email and IM)

A boy, Tim, types at a computer.

<ding, ding, ding>

Tim squints his eyes and clenches his teeth.

TIM: Mmmmm. Must. Not. Check email again. Must. Not. Check. Oh, who am I kidding?

An email appears on Tim's computer screen. Tim reads the typed email.

TIM: Dear Tim and Moby, How do people email each other, and what is IM? Thanks, McKenzie S.

TIM: Well, to understand email, you gotta know about clients and servers. A server is a computer connected to the Internet that provides services like email, web pages, and other content. And a client is a machine used to access those services.

An animation shows a server sending data to a client computer.

TIM: People can get email accounts in a few ways: from a server at their school or work, from a free service online, or through their Internet providers. But all emails start out in an email client, a program used to read, receive, write, and send email.

A robot, Moby, sits next to Tim at a computer. An image shows a new message form in an email client. A cursor clicks send on the email message.

TIM: When you hit send, your email client contacts a special server that handles outgoing mail. This is called a Simple Mail Transfer Protocol server, or just an SMTP server. An animation shows the email on the client's computer going to the SMTP server.

TIM: So, let's say my email address is tim@awesomelycool.com.
Moby giggles.

TIM: And I want to send an email to moby@uglybot.com.

MOBY: Beep.

Moby frowns.

TIM: The recipient name is moby and the domain name is uglybot.com.

An image shows Tim's email message. The To field shows Moby's email address. The two parts of Moby's address are highlighted as Tim describes them.

TIM: My mail client starts by calling the SMTP server for awesomelycool.com and telling it that I want to send an email to someone at uglybot.com.

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An animation shows the email going from the client computer to awesomelycool.com's SMTP server.

TIM: To locate Uglybot's mail server, my SMTP server contacts a Domain Name Server, or DNS. The DNS is like a phone book for computers. When it gets my SMTP server's request, the DNS replies with the IP address of uglybot.com's email server.

An animation shows the SMTP server connecting to the DNS server. The DNS searches for and finds a number for an IP address. The IP address goes back to the SMTP server.

TIM: The IP, or Internet Protocol, address is a unique number that every computer on the Web has. It may look like nonsense to us, but those numbers give the exact location of uglybot.com's email server. An animation shows awesomelycool's SMTP server connect to uglybot's SMTP server using the IP address.

MOBY: Beep.

TIM: Yeah, it can get a little complicated, but stick with me; we're almost there! Once uglybot.com's SMTP server gets my email, it sends it to another server: uglybot's Post Office Protocol, or POP3. The animation shows the email going from awesomelycool's SMTP server to uglybot's SMTP server to the POP3 server.

TIM: When Moby accesses his email account with his email client, the POP3 server puts the message into his inbox!

The animation shows the client computer activated. The POP three server connects to the client computer, which shows the email on its screen.

MOBY: Beep.

Moby reads his email message. It says, Clean your room. He looks annoyed.

TIM: Instant messages, or IMs, are similar but are sent in real time, more like making a phone call than writing a letter. There are different IM clients, but unlike email, you can usually only talk to people who use the same client. An animation shows Tim logging onto his IM client.

TIM: When you log on using an IM client, the server checks to see if any of your contacts are logged in.

An animation shows a computer, labeled as client 1, connecting with a server that searches and finds a second computer, labeled client 2. The server connects with client 2.

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TIM: If any are, the server exchanges your addresses, letting you know that they're on, and letting them know that you're on. The whole process only takes seconds!

An animation shows the server informing each client computer the other client computer is logged on.

TIM: Once that's done, you can send messages directly to your friend's computer.

The animation shows the server fading to the background as the computers exchange data with each other.

MOBY: Beep.

TIM: Well, there are few more things to know about using IM or email. First of all, your messages aren't really private, and they can be saved for a long time. So never send anything that you wouldn't want lots of people reading. And don't forget your manners. Be polite, whether on email or IM.

Tim's friend looks angry as she types a message on her computer.

TIM: Finally, be safe! You wouldn't talk to strangers in real life, so don't talk to them online. Remember that people can easily claim to be something they're not.

An animation shows instant messages from strangergirl13 requesting to talk about stuff. The message is closed. An image shows it was an adult man sending the IM.

TIM: And that's it for email and IM.

MOBY: Beep.

TIM: Yep, back to studying.

Tim types at his computer.

<email ding>

TIM: Must resist. Must resist.

Tim squints his eyes and clenches his teeth.

TIM: Oh, whatever.

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Quiz Questions

1. In the email address Moby@brainpop.com, what is the domain name?

- a. Moby
- b. Brainpop
- c. Brainpop.com
- d. Moby@brainpop.com

2. What does SMTP stand for?

- a. Source Mail Telnet Provider
- b. Standard Model Transfer Provider
- c. Special Modem Transfer Policy
- d. Simple Mail Transfer Protocol

3. What is the key difference between email and instant messaging?

- a. Email is faster
- b. You can usually only IM people who use the same client
- c. Instant messaging is safer
- d. You can usually only email people who use the same client

4. Place the following events in sequence:

- A) You email client calls its SMTP server;
- B) The SMTP server contacts a domain name server;
- C) An email is sent to a POP3 server

- a. A, C, B
- b. C, B, A
- c. B, A, C
- d. A, B, C

5. How is a DNS similar to a phone book?

- a. It is distributed for free to everyone with an email account
- b. It contains the IP addresses of many different email servers
- c. It lists the phone numbers of many different homes and businesses
- d. It is updated and republished every year by the phone company

6. Which server actually puts email into your inbox?

- a. DNS
- b. SMTP
- c. IP address
- d. POP3

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7. What happens immediately after you log on to your IM server?

- a. The server checks to see which of your contacts are logged in
- b. The server contacts the POP3 servers of all your contacts
- c. The server begins sending instant messages to your contacts
- d. Your server emails your contacts' servers, and their servers email them

8. Which of the following is a true statement about email and instant messaging?

- a. Once an email message is deleted, it's gone forever
- b. It often takes hours for an IM server to put you in touch with your contacts
- c. Email is the safest, most private form of communication there is
- d. Copies of your email messages can be saved for a long time

9. Which word best describes how you should interact with others on the Internet?

- a. Heatedly
- b. Trustingly
- c. Courteously
- d. Indifferently

10. If you receive an email or instant message from someone you don't know, what's the best thing to do?

- a. Respond immediately asking who the person is
- b. Write back, and see if you can figure out who it is
- c. Call the police immediately
- d. Ignore it