

TOP SECRET



Spy Club

Month 1

INTRODUCTION

Welcome to the most elite after-school espionage agency, founded in the year 1891 along with the Free Library of Philadelphia. Both of these entities were founded by Dr. William Pepper, and both are headquartered at 1901 Vine Street Philadelphia, PA.

Dr. Pepper, being good friends with the elite of his day, was charged with not only keeping books, but also keeping secrets. Highly sensitive information was passed to Dr. Pepper ranging in origin from the founding fathers to well-known authors. These pieces of sensitive information were written down and stored in individual cryptex. The cryptex were then sealed in a vault housed directly below the main branch of the Free Library.

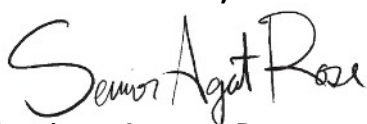
Select librarians were and still do double as secret agents, charged with the safe keeping of the vault. As our country developed in the 18th and 19th centuries, more and more secrets were asked for safe keeping at the Philadelphia vault. Room was limited, and when the vault reached capacity several more were created, residing under the main branches of the Chicago Public Library, the Los Angeles Public Library and the Houston Public Library.

I, Senior Agent Rose, am the 5th Managing Agent of the Espionage Agency. It is with much urgency that I write to you today. There has been a security breach at our Chicago Location and one, maybe more, cryptex have been stolen. The nature of the crime leads us to believe that this was an inside job - that one of our own under cover librarians went rogue.

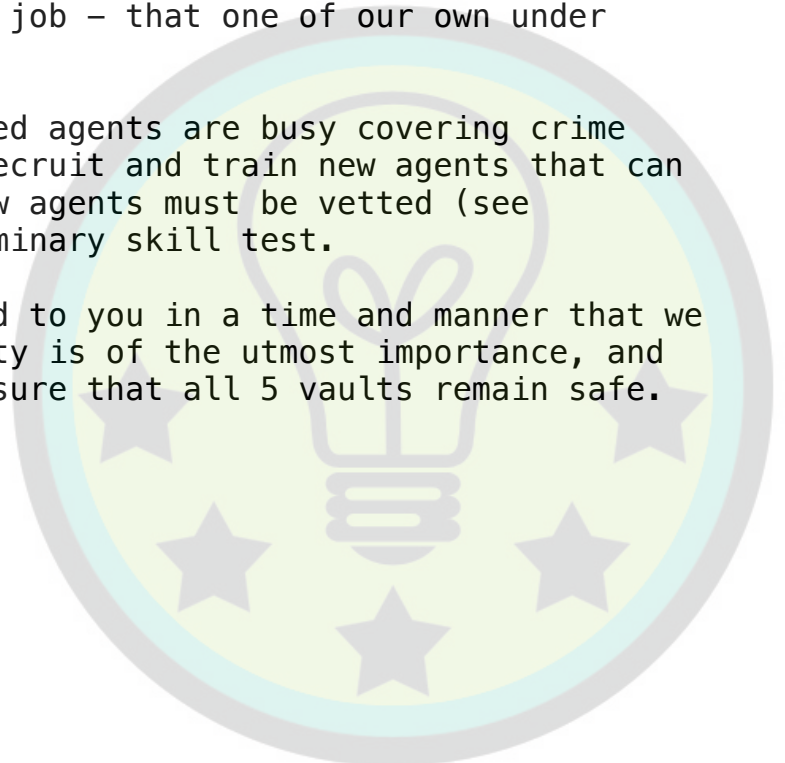
Seeing as all of my Chicago-based agents are busy covering crime scene, I'm counting on you to recruit and train new agents that can be assigned to the case. All new agents must be vetted (see application) and pass the preliminary skill test.

All information will be released to you in a time and manner that we at headquarters see fit. Security is of the utmost importance, and we will take all measures to ensure that all 5 vaults remain safe.

Best of luck,



Senior Agent Rose



Key Terms for Senior Agents:

Inquiry-Based Learning:

“A form of active learning that starts by posing questions, problems or scenarios – rather than simply presenting established facts or portraying a smooth path to knowledge.” (wikipedia)

Pedagogy of Play:

A method of teaching and learning while playing.

Re-story-ing:

A pedagogy, or method of teaching, through narrative. Engaging students with a narrative, or story, and then having them contribute their own story to the ongoing narrative.

This curriculum is steeped in the methodologies of **inquiry, play** and **re-story-ing**. The daily missions are a hands-on introduction to a new concept, with the aim of sparking curiosity for further research (inquiry). The framework revolves around playing ‘secret agent’ – this includes the facilitator. Everyone must be in on it, and the more engaged you are with the game the more your audience will be. Finally, the narrative of the stolen cryptex is what will hook the students. They will contribute their stories to the ongoing plot by completing missions and adding information that they uncover during their inquiry-based learning.

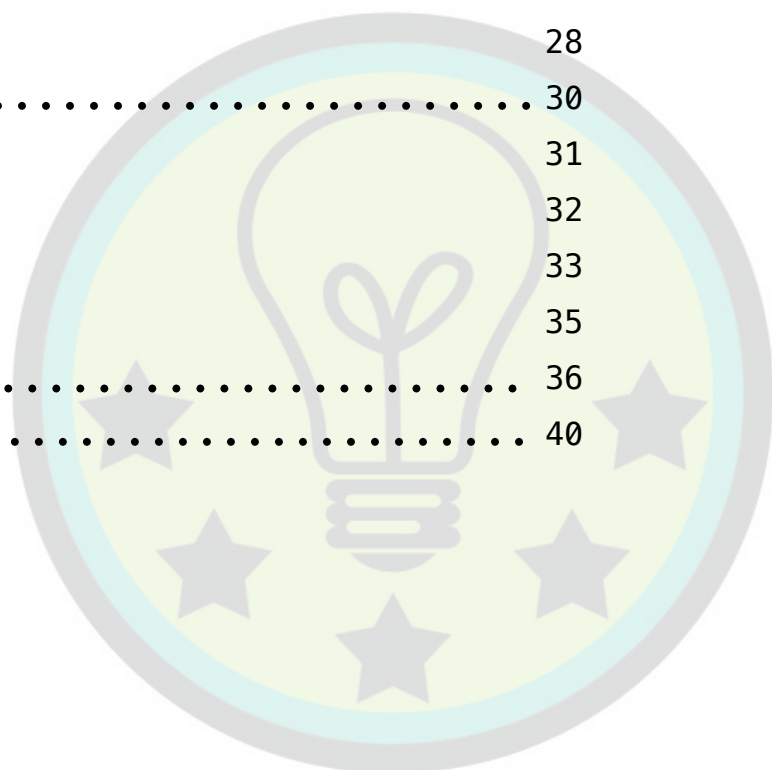
As a facilitator, your main objective will be to help inspire **curiosity** and **independent learning** by posing questions and encouraging independent and collaborative exploration that goes above and beyond the information presented in the curriculum. We, as a species are naturally curious, and without the strict framework and stress of formal assessment found in the school system, appealing to this innate curiosity will not only be natural but a breath of fresh air for the students.

Encouraging **failure** is another big component of this curriculum. “Failing Forward” is the idea that we can use our failures to learn and move forward. Some would even argue that if you’re not failing then you’re not trying hard enough!

Join in the fun, ask questions, encourage exploration and always fail forward! All my best, Brittany R. Jacobs.

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Month #1: USA

WEEK ONE	Forensics 101
Day 1	Agent Applications & Introduction
Day 2	Chicago - Mission #001 - Fingerprint Match-Up
Day 3	Chicago - Mission#002 - Fingerprint Pull
Day 4	Chicago - Mission#003 - Composite Sketch
Day 5	Chicago - Report to Headquarters
WEEK TWO	Forensics 101
Day 1	Chicago - Mission#004 - Foot to Height
Day 2	Chicago - Mission#005 - Handwriting Analysis
Day 3	Chicago - Mission#006 - Change Blindness
Day 4	Chicago - Mission#007 - Ticket Stub
Day 5	Chicago - Report to Headquarters
WEEK THREE	Forensics 101
Day 1	Chicago - Mission#008 - Map it Out
Day 2	St. Louis - Mission#009 - Hair Sample Analysis
Day 3	St. Louis - Mission#010 - Chromatography Lab
Day 4	Dallas - Mission#011 - Fingerprint Sample
Day 5	Dallas - Report to Headquarters
WEEK FOUR	Forensics 101
Day 1	Houston - Mission#012 - Video Surveillance
Day 2	Houston - Mission#013 - Location, Location, Location
Day 3	IAH- Mission#014 - Intercepted Letter
Day 4	IAH - Mission#015 - Audio Surveillance
Day 5	IAH - Report to Headquarters

DAILY SCHEDULE

Each day will follow the same schedule with variations in training exercises and missions. Because a good agent is always working on developing their skills, each day will open with a TRAINING EXERCISE. Depending on your agents and the particular exercise this can range anywhere from 15 to 30 minutes. This leave 45-30 minutes to complete the assigned mission for the day.

Should agents finish the mission before the session is over, then encourage them to explore the daily topic deeper or to offer assistance to agents still working. Another option is to send them back to the "training area" to continue working on their skills.

Example Schedule:

5 Minutes	Welcome & Check-In - Welcome agents to the session and inquire about their goings on. This can include things happening in the classroom, at home or related to the club.
15-30 Minutes	Training Exercise - Introduce the training exercise and talk with the kids about how the skills being sharpened relate to our counterpart agents in the FBI and CIA. Encourage discussion about everyday activities that also incorporate the skills. Allow each agents to complete at least one round of the training exercise.
45-30 Minutes	Daily Mission - Introduce the daily mission and let the agents loose to complete it. Be available for questions, and encourage agents to think deeper and ask their own questions about the topics and mission at hand.
5 Minutes (if time allows)	Recap - If time allows for a few minutes at the end of the session, give agents a change to verbalize their thoughts about the daily mission and what's taking place with the case on a larger scale.

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2018-2019

WEEK ONE

Training: Laser Maze

Each day this week the FLPEA meetings will open with a laser maze training exercise for the agents. The difficulty level of the maze on day one will be EASY and progressively work it's way up to HARD by day five.

Supplies Needed:

- red yarn
- 10 chairs

Set-Up:

Set out the chairs in two rows, back to back, with a three foot gap in between the rows. Start at one end of the chairs, and tie the end of the yarn to one of the legs. Weave the yarn back and forth between the chairs, leaving gaps large enough for children to crawl through. As this activity gets more difficult, you will leave smaller and smaller spaces. Once you've reached the end of the chairs then cut the yarn and tie it off on another leg.

Missions:

Day 1	Agent Applications, Certificate of Membership, ID Badges & Pins
Day 2	Training: Laser Maze VIDEO MESSAGE: HEADQUARTERS Mission#001: Fingerprint Match-Up
Day 3	Training: Laser Maze Mission#002: Fingerprint Pull
Day 4	Training: Laser Maze VIDEO MESSAGE: EYEWITNESS ACCOUNT Mission#003: Composite Sketch
Day 5	Training: Laser Maze Report to Headquarters

GL2 Spy Club

2018-2019

Name: _____
first last

Birth Date: _____

Grade: _____

School: _____

Assigned Agent #: _____

Chosen Alias: _____

Fingerprints

INDEX	MIDDLE	RING
	Dominant Hand	
THUMB	R L	PINKY

Skills: _____

Why do you want to be an agent?: _____

By filling out and signing this application I, _____
print name
promise to uphold the Free Library of Philadelphia Espionage Agency's excellent standard of work, secrecy and success. I will be respectful, and work together with my fellow agents. Above all else, I, _____ , promise to keep the FLPEA, and all
print name
the missions I'm sent on, TOP SECRET.

Date: _____ Signature: _____

Special Agent Signature: _____

CERTIFICATE OF MEMBERSHIP

This Certifies that

*Has successfully completed the training
program requirement for the*

ESPIONAGE AGENCY

DATE

SPECIAL AGENT

Mission#001

Materials Provided by Headquarters:

- Fingerprints

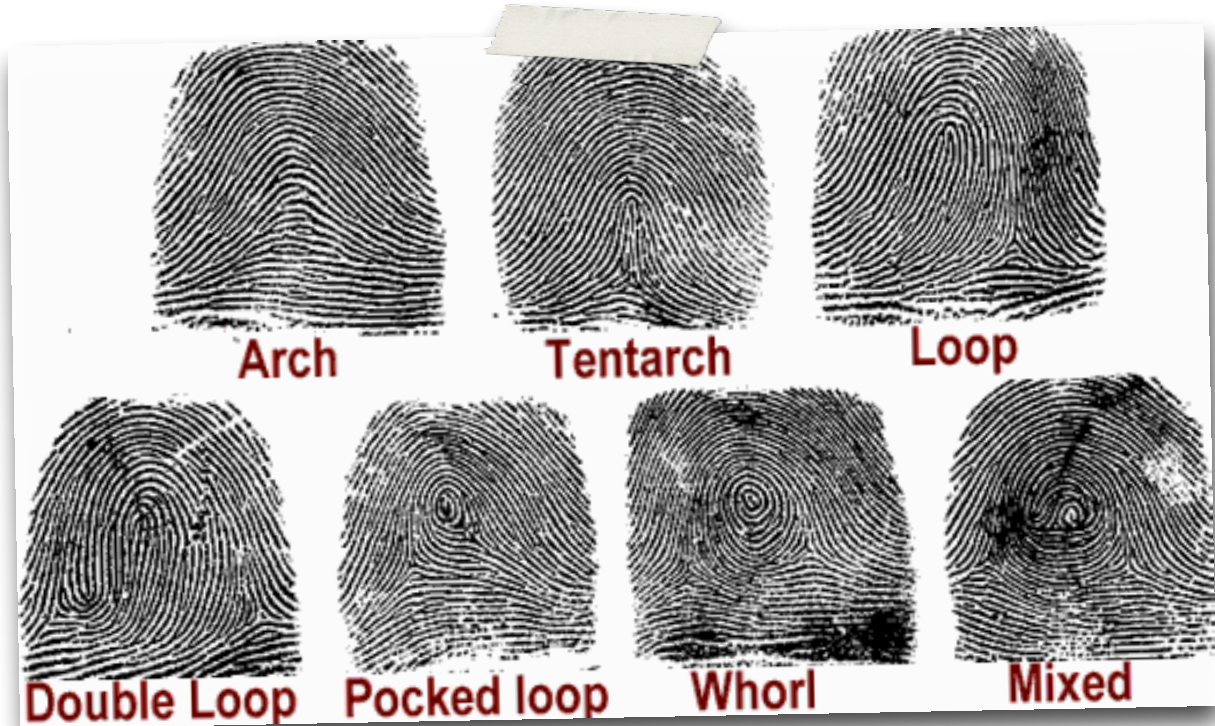
Action: Fingerprint Match-Up

Mission: Use the fingerprints pulled from the crime scene along with our digital magnifier to determine how many people were on the job, as well as what fingerprint pattern they have.

Just like a snowflake, no two people's fingerprints are alike. Even identical twins have different fingerprints. Fingerprints are one way of identifying people, along with height, hair, eye color, skin, etc. Though a person's hair, height or eye color may change as they age, a person's fingerprints remain the same.

According to our counterparts at the FBI (Federal Bureau of Investigation), there are seven different fingerprint patterns: see next page.





Prints pulled from crime scene:



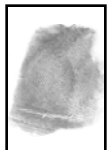
Print 001

Pattern Type: _____



Print 002

Pattern Type: _____



Print 003

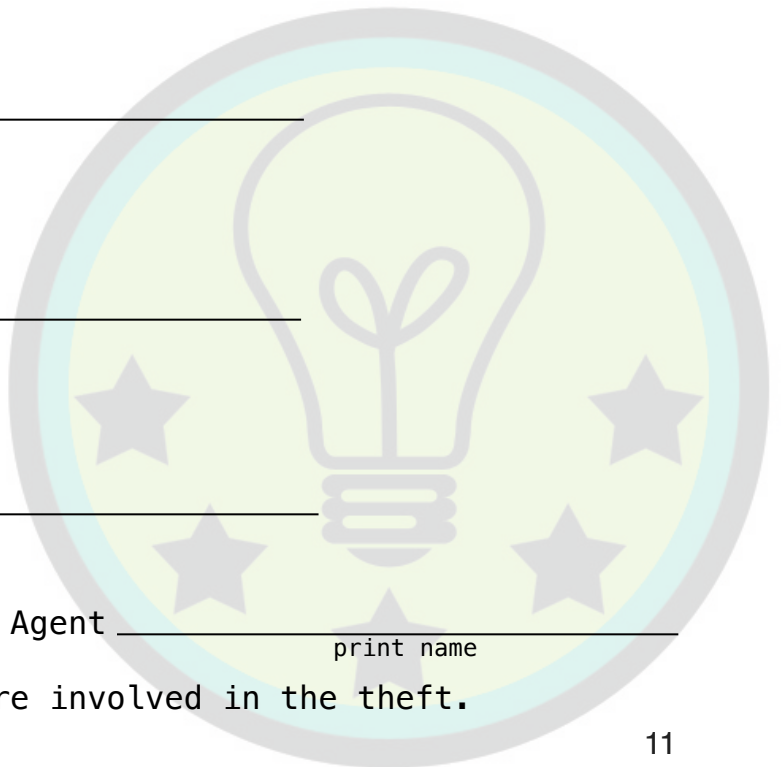
Pattern Type: _____



Print 004

Pattern Type: _____

Based on the above findings I, Agent _____ print name
believe _____ people were involved in the theft.



Mission#002

Materials Provided by Headquarters:

- Fingerprints

Action: Fingerprint Pull

Mission: We at Headquarters have come across some fresh fingerprints for you to analyze. Using the materials given to you, along with what you've learned about fingerprints, pull the prints off of the glasses. Use the digital microscope to determine what print patterns they are, as well as cross-examining them with yesterday's prints to see if we've got duplicates.

Prints pulled from crime scene:

Print 001

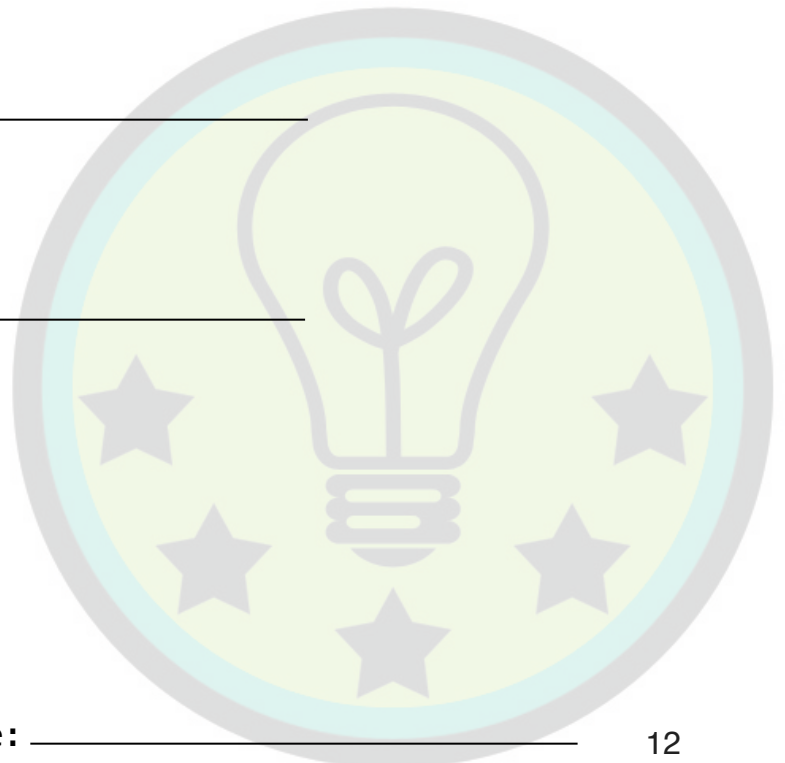
Pattern Type: _____

Print 002

Pattern Type: _____

Print 003

Pattern Type: _____



Signature: _____

Mission#003

Materials Provided by Headquarters:

- Eyewitness Account (video)

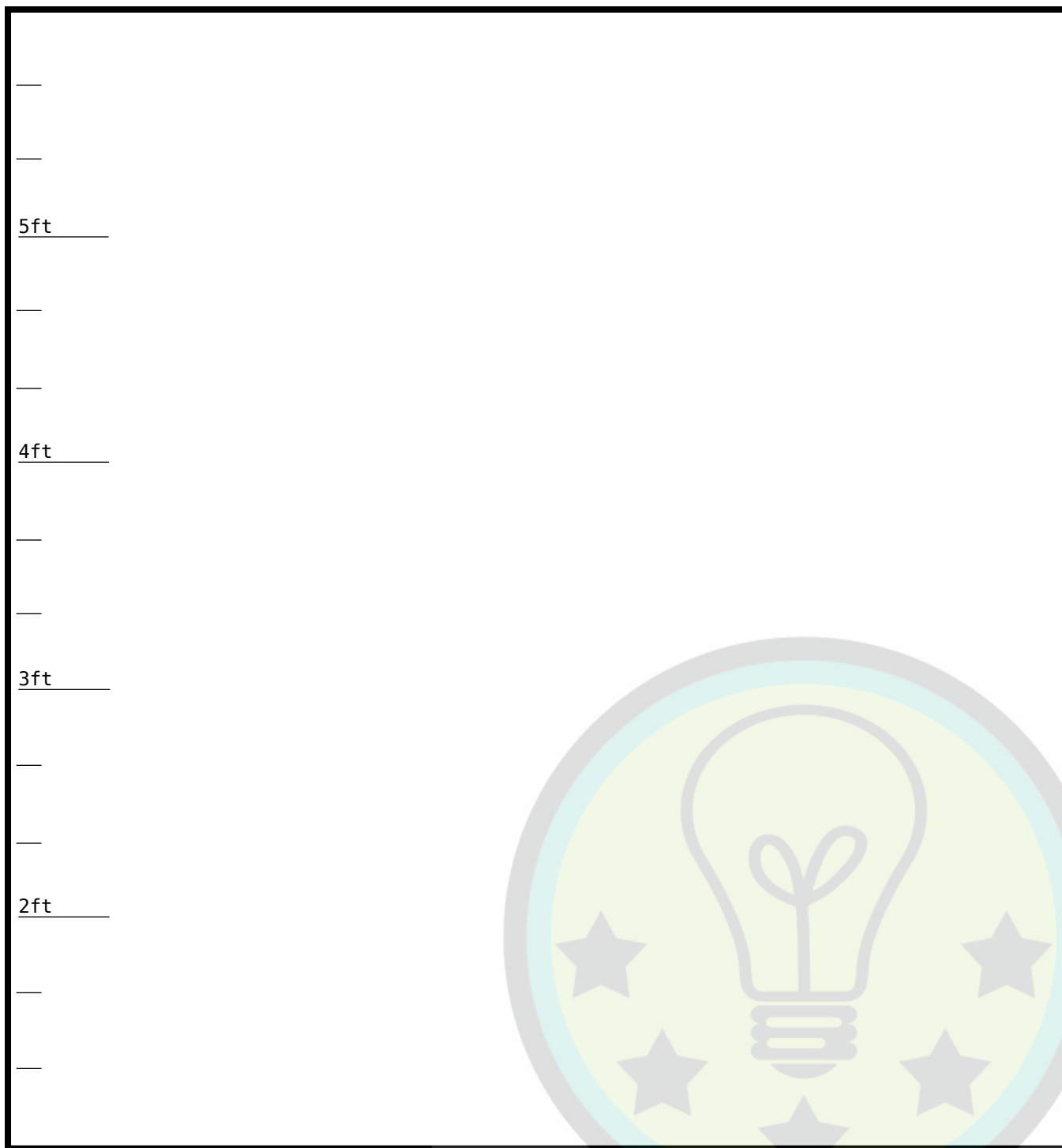
Action: Composite Sketch

Mission: A composite sketch, or police sketch, is a very successful tool used to apprehend, or catch, criminals when no photo or video surveillance is available. Based on an eyewitness' description, a sketch artist creates a drawing of the suspect. Sketch artists have to be very attuned to detail, for sometimes it's the smallest aspect that makes the biggest difference.

Senior Agent Smith was fortunate enough to catch a glimpse of our suspect as they fled the crime scene. Watch the eyewitness account video. Pay close attention, and then create your own composite sketch of the described person. If we can get a face to match-up with one of our employees, then this could be a big break in the case!



WANTED



Signature: _____

Report to Headquarters

Reporting Agent: _____

Date: _____

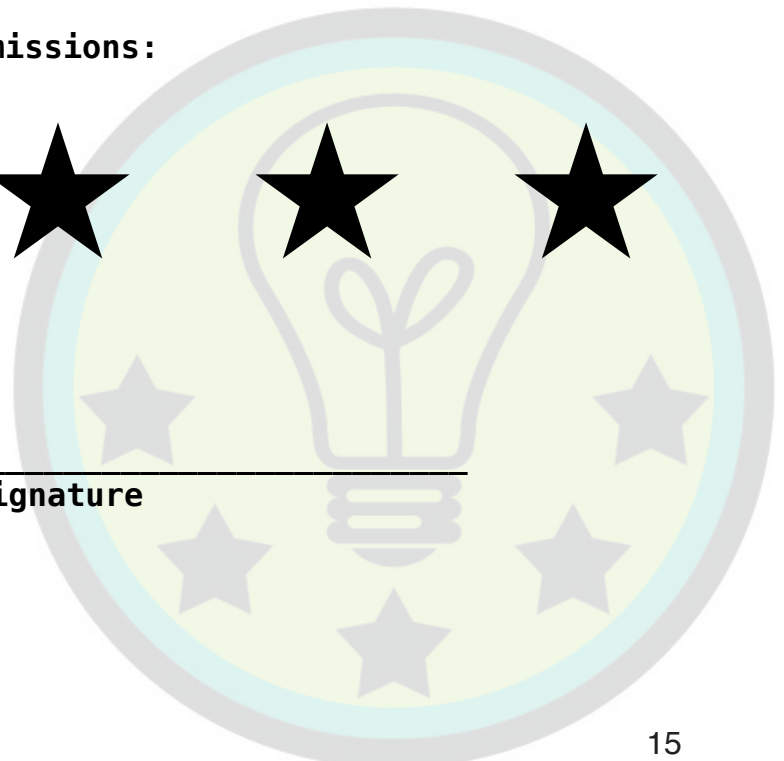
Overview of this week's missions:

Based on the information gathered I, _____,
believe the suspect(s) _____

Rating of this week's assigned missions:



Signature



WEEK TWO

Training: MINEFIELD

Each day this week the FLPEA meetings will open with a minefield training exercise for the agents. The difficulty level of the field on day one will be EASY and progressively work it's way up to HARD by five.

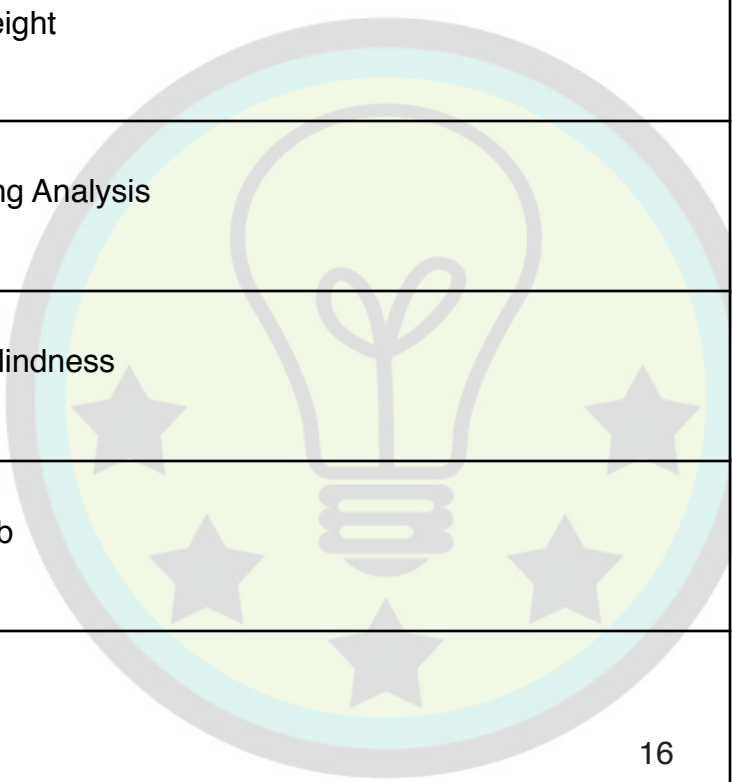
Supplies Needed:

- origami paper
- duct tape
- minefield template (pg. 16)

Set-Up:

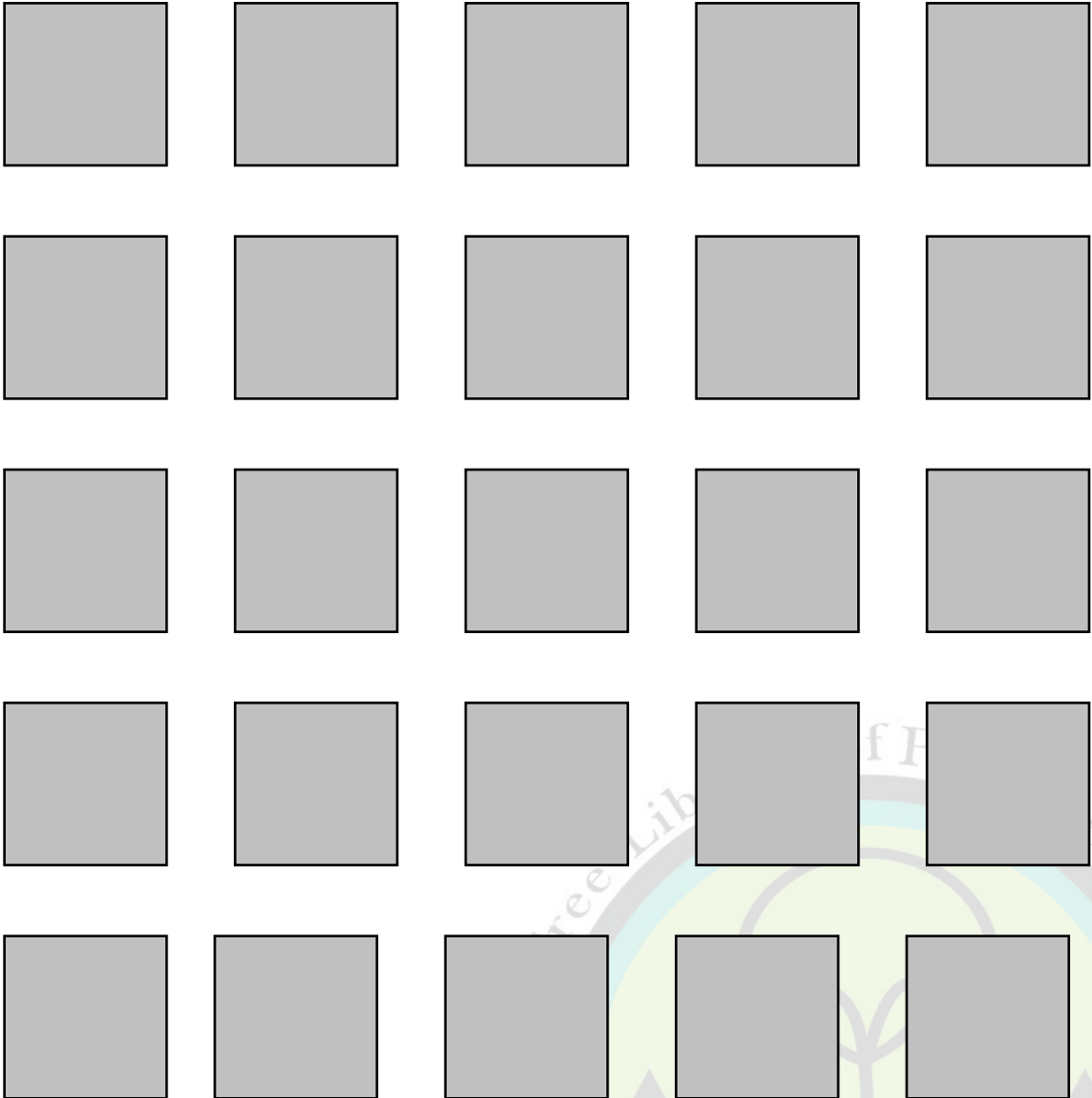
Set out the origami paper on the ground in a five by five grid, with about a foot of space in between each paper. Tape the papers down on both the top and bottom. The kids will be stepping on the paper, so make sure that they are really secure to the floor. Using the minefield template, cross out squares – this will indicate “danger blocks”. If an agent steps on a danger box, then they are out. The point of the training is to watch carefully where agents before you have stepped, and successfully cross the field without stepping on a danger block.

Day 1	Training: Minefield Mission#004: Foot to Height
Day 2	Training: Minefield Mission#005: Handwriting Analysis
Day 3	Training: Minefield Mission#006: Change Blindness
Day 4	Training: Minefield Mission#007: Ticket Stub
Day 5	Training: Minefield Report to Headquarters



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Design your own minefield and test your fellow agents!



Mission#004

Materials Provided by Headquarters:

- Footprints

Action: Foot to Height

Mission: In addition to fingerprints, another excellent way to ascertain information about a suspect is via footprints left behind at the scene of the crime. Investigators are able to determine the general height of the suspect by the size of the footprint left behind.

The length of a person's foot is approximately 15% of their height. Using this information along with the footprints provided by headquarters, determine the height of the suspect.

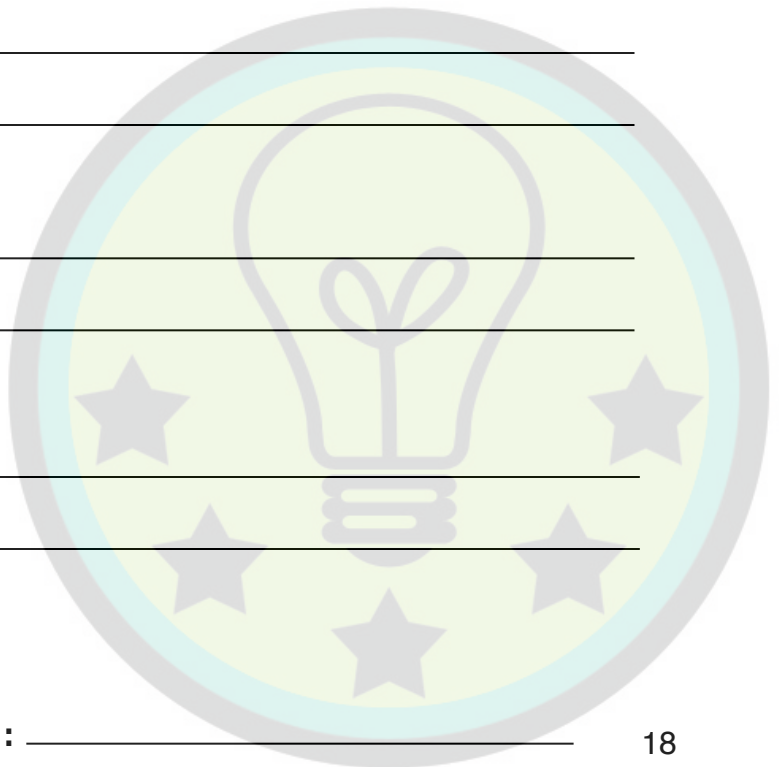
Footprint Samples from crime scene:

Sample 001: _____

Sample 002: _____

Sample 003: _____

Sample 004: _____



Signature: _____

GL2 Espionage Agency

Suspect List



SUSPECT ONE

Secret Agent: Claudio Velasquez

Alias: Fox

Age: 33

Height: 5'9"

Last Seen: Central Library Cafe



SUSPECT TWO

Secret Agent: Briz McDonald

Alias: Reader

Age: 35

Height: 5'2"

Last Seen: Central Library Children's Department



SUSPECT THREE

Secret Agent: OB Brown

Alias: Wiz Kid

Age: 25

Height: 5'6"

Last Seen: Central Library Main Lobby



SUSPECT FOUR

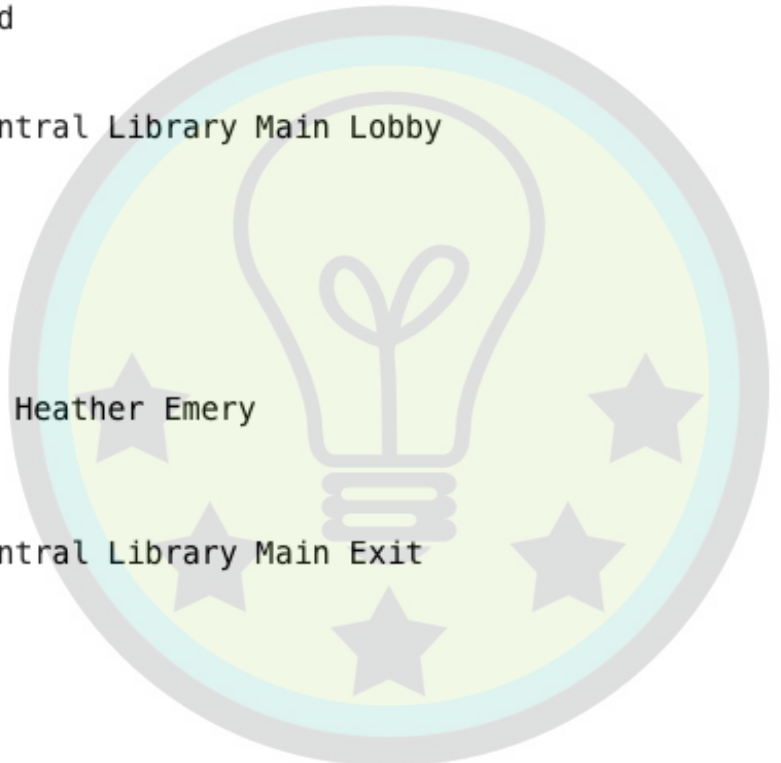
Secret Agent: Heather Emery

Alias: Tango

Age: 30

Height: 5'5"

Last Seen: Central Library Main Exit



Mission#005

Materials Provided by Headquarters:

- Evidence with handwritten note
- Handwriting on file from suspect list

Action: Handwriting Match-Up

Mission: Handwriting varies from person to person, and it varies as people get older. However, there are tell tale signs to match-up a person's writing samples, and this form of identification is used by our counterparts at the FBI and CIA.

We received evidence from the crime scene which includes a handwritten note. Use the files provided by headquarters to determine if the handwriting on the evidence matches up with any of the suspects' handwriting.



Signature: _____ 20

Report to Headquarters

Reporting Agent: _____

Date: _____

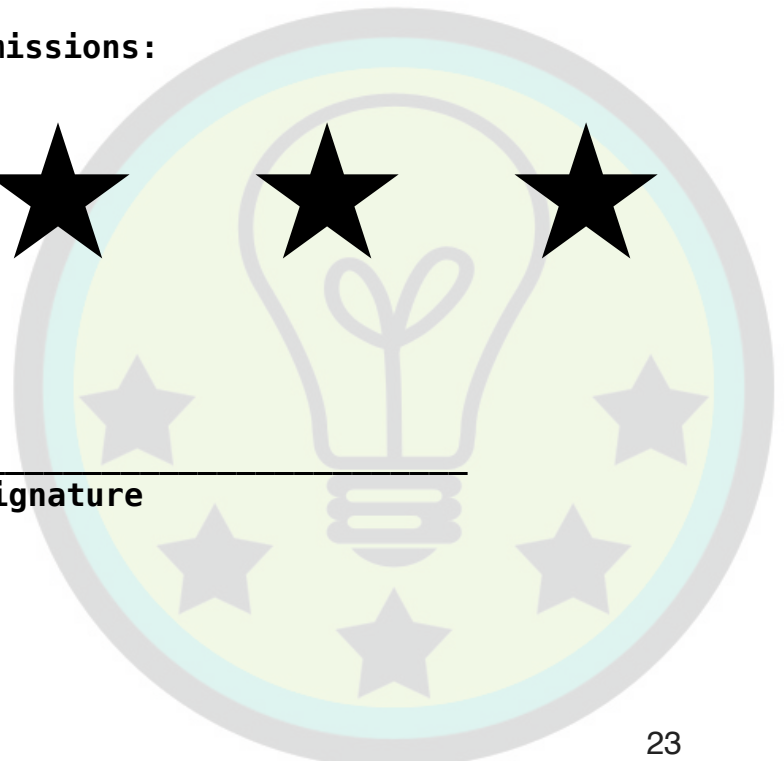
Overview of this week's missions:

Based on the information gathered I, _____,
believe the suspect(s) _____

Rating of this week's assigned missions:



Signature



WEEK THREE

Training: CHARADES

Each day this week the FLPEA meetings will open with a charades training exercise for the agents. The difficulty level of the field on day one will be EASY and progressively work it's way up to HARD by five.

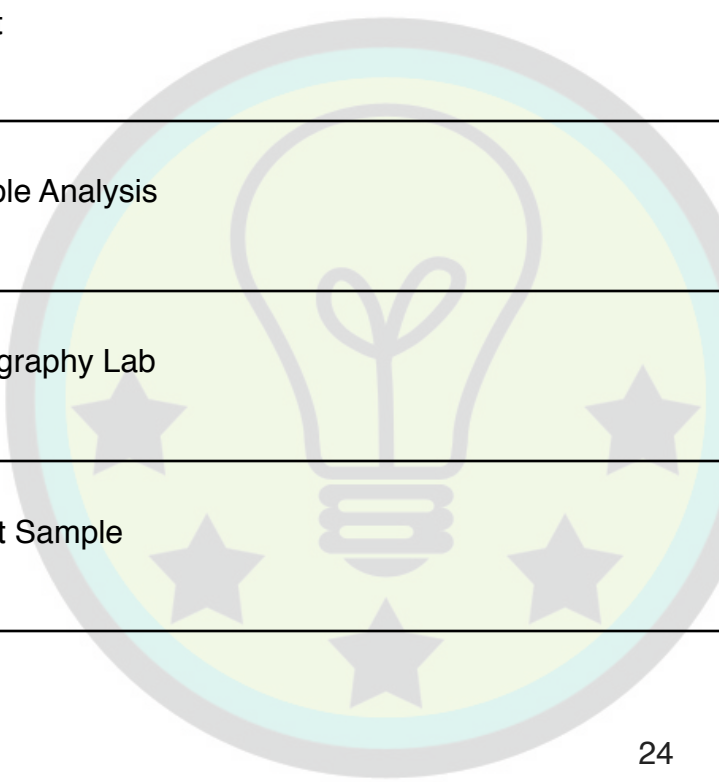
Supplies Needed:

- Scrap Paper with Suggestions
- bowl

Set-Up:

In a bowl, or another object, place the scrap papers with suggestions written on them. Each agent will take their turn selecting a paper, and then trying to get their fellow agents to guess the correct word by acting it out. To start out with, let the agents make sound and write "air letters" but as the week progresses and the training gets more difficult then eliminate the easy points. No words, sounds, air letters, etc.

Day 1	Training: Charades Mission#008: Map it Out
Day 2	Training: Charades Mission#009: Hair Sample Analysis
Day 3	Training: Charades Mission#010: Chromatography Lab
Day 4	Training: Charades Mission#011: Fingerprint Sample
Day 5	Training: Charades Report to Headquarters



Mission#008

Materials Provided by Headquarters:

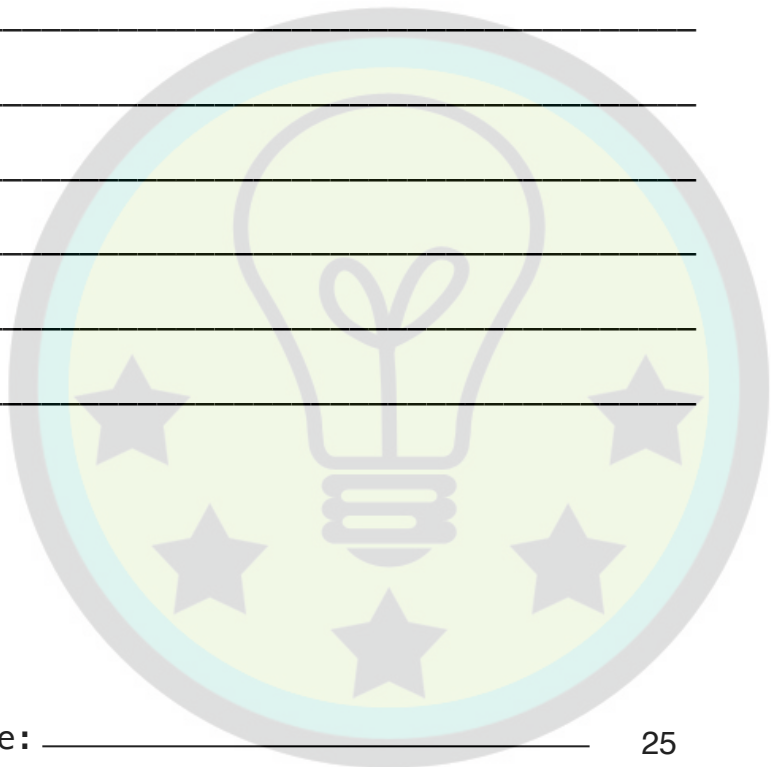
- Dot image

Action: Map it Out

Mission: Thanks to your excellent work determining the final destination listed on the ticket stub last week we were able to get an agent out in the field to track down the specific train you identified. The suspect was not found, however an interesting piece of evidence may have been discovered.

Examine the evidence and determine what the abstract image could possibly mean. Make notes in the section below.

Notes:



Signature: _____

Mission#009

Materials Provided by Headquarters:

- Hair Samples

Action: Hair Analysis

Mission: In addition to fingerprints, another excellent way to identify a person in a crime is from a hair sample. DNA (Deoxyribonucleic Acid) can be found in human hair, and used by forensic investigators to identify people.

Using the digital microscope, carefully analyze the hair samples. Take notes on each one, and then see if you can place one with a person on our suspect list.

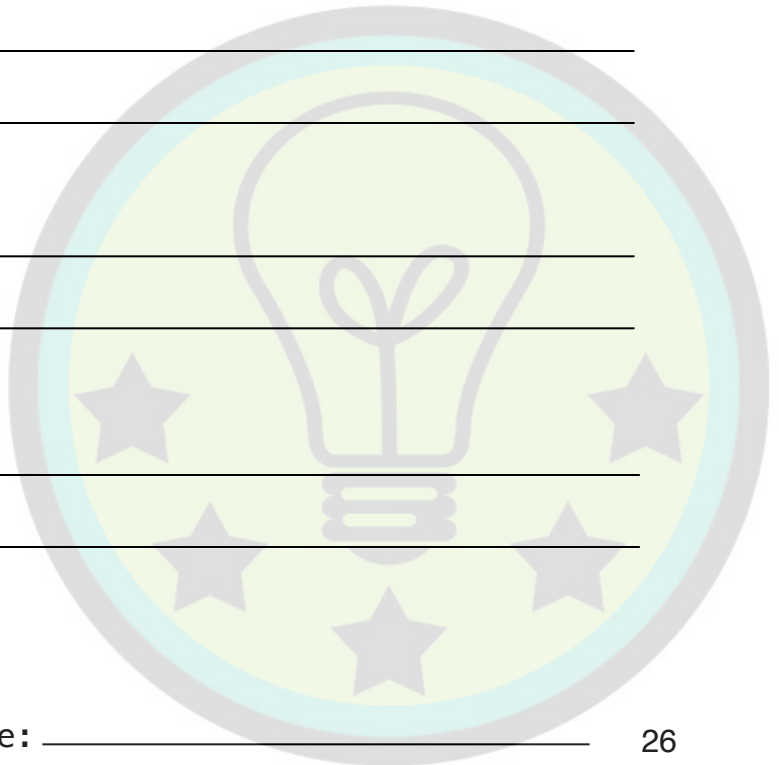
Hair Samples from crime scene:

Sample 001: _____

Sample 002: _____

Sample 003: _____

Sample 004: _____



Signature: _____

Mission#010

Materials Provided by Headquarters:

- Pens from suspects' desks
- Handwritten note from mission#005

Action: Chromatography Lab

Mission: Our counterparts over at the FBI and CIA use a science called CHROMATOGRAPHY, "a process in which a chemical mixture carried by a liquid or gas is separated into components as a result of differential distribution of the solutes as they flow around or over a stationary liquid or solid phase." (Webster)

Chromatography is the science of separating the colors used in particular inks. Using the pens collected from each of the suspects' desks along with the handwriting sample collected from mission #005, determine if there is a match between the pens used.

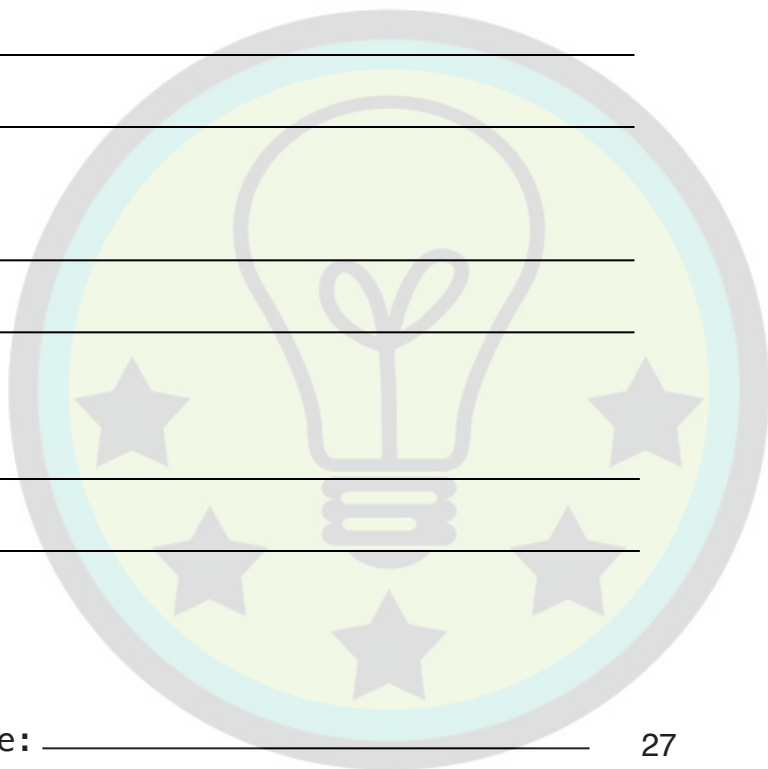
Notes on Chromatography Samples:

Sample 001: _____

Sample 002: _____

Sample 003: _____

Sample 004: _____



Signature: _____ 27

Mission#011

Materials Provided by Headquarters:

- Glass cups
- Fingerprint Dust & brushes

Action: Fingerprint Samples

Mission: An agent out in the field has sent in these cups for fingerprint analysis. Use your knowledge on fingerprints to carefully determine whether or not these prints are

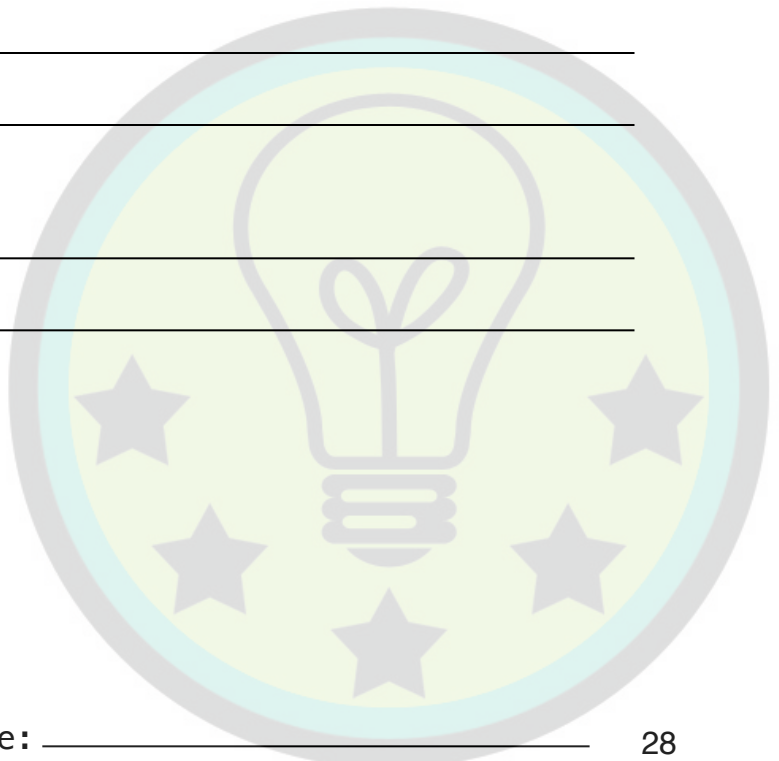
- A) complete and viable prints used for evidence
- B) align with the prints taken in missions #001 & #002

Notes on Prints:

Sample 001: _____

Sample 002: _____

Sample 003: _____



Signature: _____

Report to Headquarters

Reporting Agent: _____

Date: _____

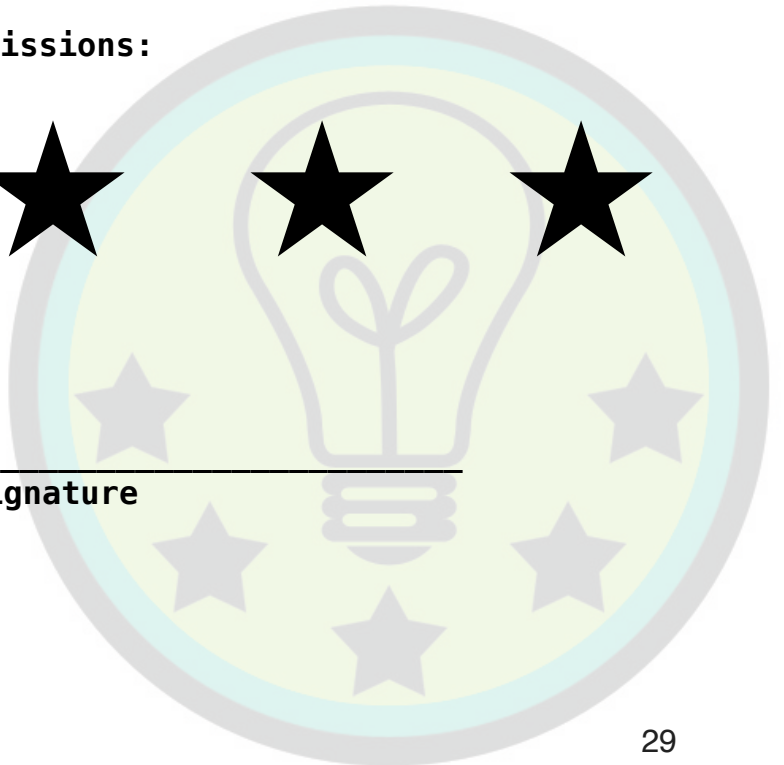
Overview of this week's missions:

Based on the information gathered I, _____,
believe the suspect(s) _____

Rating of this week's assigned missions:



Signature



WEEK FOUR

Training: IMAGE MEMORY

Each day this week the FLPEA meetings will open with an Image Memory training exercise for the agents. The difficulty level of the field on day one will be EASY and progressively work it's way up to HARD by five.

Supplies Needed:

- I Spy Book, or digital image of various objects

Set-Up:

Have the agents sit in a group, so that everyone can see the Senior Agent or the tv screen. The Senior Agent will then reveal the image for a certain amount of time (more time at the beginning of the week, with less and less time each day)

Day 1	Training: Image Memory Mission#012: Video Surveillance
Day 2	Training: Image Memory Mission#013: Location, Location, Location
Day 3	Training: Image Memory Mission#014: Intercepted Letter
Day 4	Training: Image Memory Mission#015: Audio Surveillance
Day 5	Training: Image Memory Report to Headquarters

Mission#013

Materials Provided by Headquarters:

- Foreign Coins

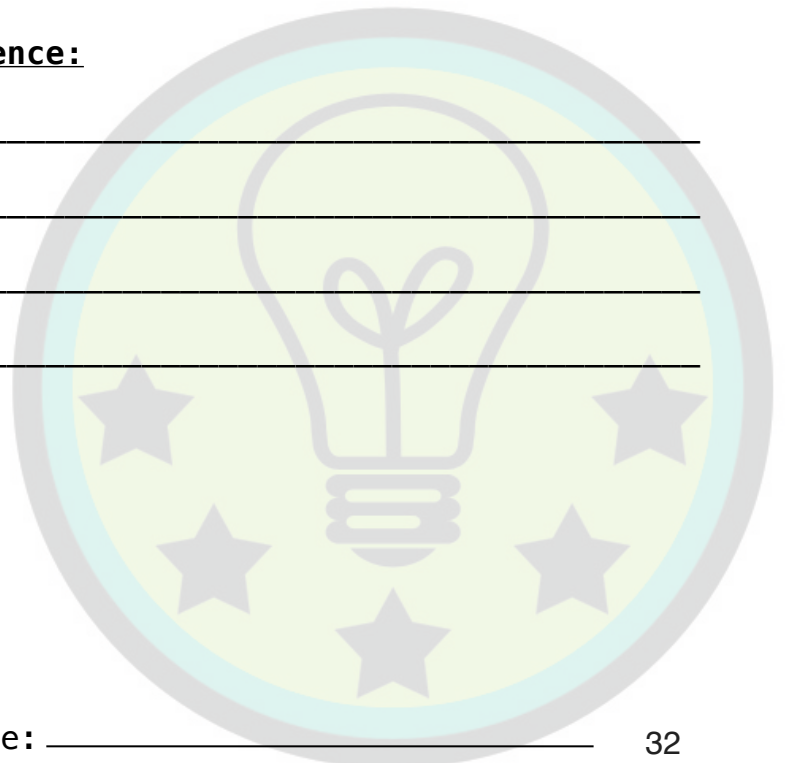
Action: Location, Location, Location

Mission: After your work examining the video surveillance, our agents on the field were able to go to the location of the surveillance and gather several pieces of evidence.

Examine all pieces of evidence closely, careful not to miss any details. Use the resources available to you to determine where the coins originated and what implications this has for the case.

Notes:

List of RELEVANT pieces of evidence:



Signature: _____

Mission#014

Materials Provided by Houston Office:

- Encrypted Letter

Action: Pigpen

Mission: Our agents at the Houston Office have intercepted a letter that they believe was written by our main suspect! The letter was written in PigPen and we're counting on you to break that code!

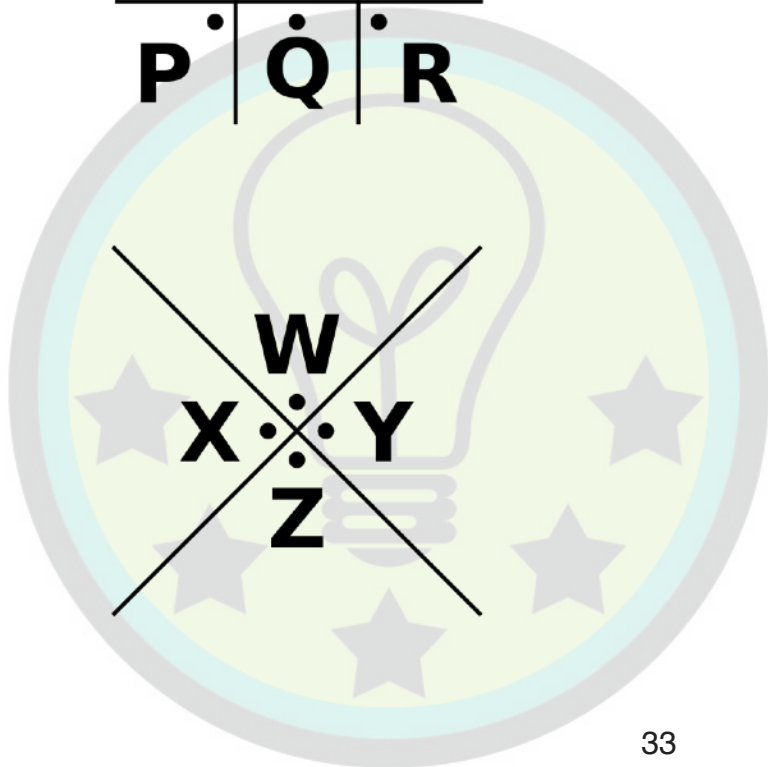
Using the Pigpen Cipher to decode the message. Additionally, carefully analyze all parts of the letter (envelope, front, back, etc.). No detail is too small!

Pigpen Cipher:

A	B	C
D	E	F
G	H	I

J .	K .	L .
M .	N .	O .
P .	Q .	R .

	S	
T		U
	V	



Report to Headquarters

Reporting Agent: _____

Date: _____

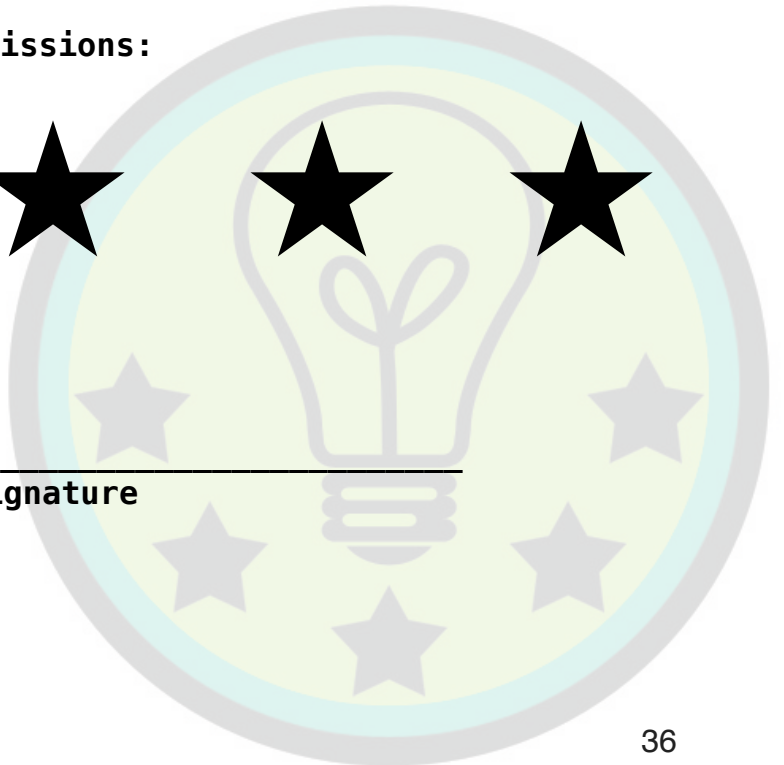
Overview of this week's missions:

Based on the information gathered I, _____,
believe the suspect(s) _____

Rating of this week's assigned missions:



Signature



GL2 Spy Club

2018-2019

Date: Tuesday March 14, 2016

Agent Attendance:

	0-3	5-6	7-8	9-10	11-12	Total
March 8	1	3	2	2	2	10
March 14	1	4	4	5	1	15
					TOTAL:	25

Training Summary:

This week our agents testing their flexibility and hand-eye coordination with a moving laser maze! I had set-up four pairs of chairs about four feet apart and wove red yarn in-between them for the laser beams. To up the anti, in-between the pairs of chairs I put 20 marbles in four balloons, blew them up and hung them from the ceiling with red yarn so they swayed about 4 inches above the ground. While the agents manipulated their way through the maze, they also had to be on the lookout for the swaying balloons (laser bombs is what the kids ended up calling them). This maze was good for all ages and had the kids very excited!

Mission One Summary:

Since last week's meeting Senior Agents at Central came across some foreign coins at the crime scene, and sent scanned photos of them to our Andorra agents to analyze. The scans came out much smaller than the actual coin size, so the agents had to use their digital microscope to get a read on where the coins were from. Of course, being foreign, the writings on the coins were in another language (Spanish). Lucky for our us, two of our agents speak Spanish and were able to help translate the writings on the coins. After much deliberation, teamwork, and digital analysis the kids deduced that the coins were Chilean. Only two of the agents (the Spanish speakers) had heard of Chile, so this was a great geography lesson for the others.

Mission Two Summary:

Our Santiago Foreign Office had sent over a Mayan Quipu (kee-poo) to our Andorra Agents. After a brief explanation of what a quipu is and what it was used for in the past, the agents were then set loose to "decode" the two number sequences on the quipu. Once they had the two 4-digit sequences, which were book call numbers, the agents had to locate the two books associated with them. Much to my surprise, none of the kids knew that books at a library were organized according to number, so this was an added mini-lesson on the dewy-decimal system. Once the kids found the books they opened them to find a secret "safe". The books had been hollowed out so37

GL2 Spy Club

2018–2019

that secret messages could be left inside. Upon finding these secret message books the kids lost. THEIR. MINDS! To say the kids were excited by this super secret mode of communication would be a gross understatement. They were FLOORED! There were two messages in each book. Two of which were riddles, and two of which were written in Spanish and needed translation. Again, the two spanish speaking agents were the super-stars here. The two riddles gave clues as to where the thief was headed, and after much thought the agents finally realized that Antarctica was the next location!

Academically Oriented:

Skills Used:	Description
Talking	Communication between agents
Reading	Reading of the clues, and overview of each mission
Writing	
Playing	Role-playing as secret agents
Flexibility & Adaptability	Agents adapted their skills for the difficulty of the tasks
Initiative & Self-Direction	Agents took control of missions after very little direction from me
Teamwork & Collaboration	All agents worked together, in pairs or larger groups, to complete missions. Older agents helped the younger ones keep up.
Critical Thinking & Problem Solving	Agents figured out that the country name is listed on the coin, as well as how to decode the quipu and riddles
Diversity	Agents worked well together and asked for each others opinions
Creativity & Innovation	Imagination was used throughout the entire meeting

S.T.E.M.:

Skills Used:	Description
Science	Analysis of foreign coins
Technology	Successful use of the digital microscope
Engineering	Agents had to think about the construction of the laser maze and it's components in order to successfully complete it
Math	Decoding the quipu (Base-Ten math is based on the quipu)

GL2 Spy Club

2018-2019

Date: Tuesday March 14, 2016

Literacy:

Skills Used:	Description
Print Motivation	After the mission several agents checked out spy themed books
Narrative Skills	The Agents retold the story of last week's missions
Vocabulary	New vocabulary words: quipu, analyze, foreign, artifact, Inca, suspect
Phonological Awareness	

Photos:



WEEKLY ASSESSMENT

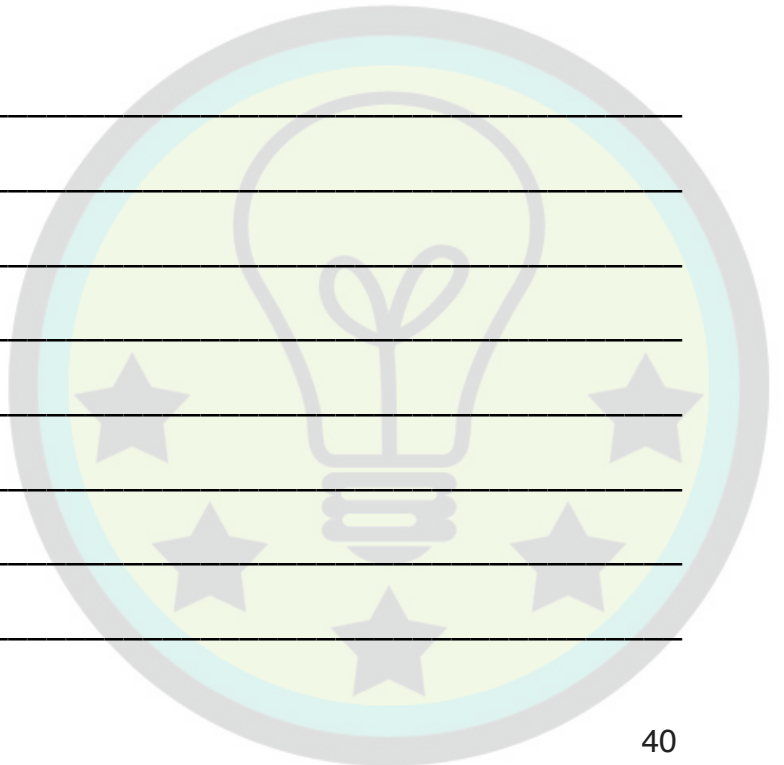
Dates:

Agent Attendance:

	5-6	7-8	9-10	11-12	Total

Training Summary:

Mission Summaries:



WEEKLY ASSESSMENT

Skills Used:	Description
Talking	
Reading	
Writing	
Playing	
Flexibility & Adaptability	
Initiative & Self-Direction	
Teamwork & Collaboration	
Critical Thinking & Problem Solving	
Diversity	
Creativity & Innovation	

Skills Used:	Description
Science	
Technology	
Engineering	
Math	

Skills Used:	Description
Print Motivation	
Narrative Skills	
Vocabulary	
Phonological Awareness	

