

Reason & Intuition

1

Making Conclusions

understanding
life

You understand yourself, others, and the world through the conclusions you make. You make conclusions using reason and intuition. Conclusions made by reason use a deliberate procedure. Conclusions made by intuition seem to just happen.

You make a good conclusion by using both reason and intuition. You need to identify meaningful connections among things when you make a conclusion. Both reason and intuition are good at finding connections, but in different ways.

Reason uses process for finding connections. For example, at the scene of a crime, a detective carefully examines what is there, looking for things that can explain what happened. After these things are collected, the detective looks for ways the things are logically connected in order to make a conclusion about what took place.

Intuition uses patterns for finding connections. You do not have to work at it; the connections seem to just present themselves. This is because reason has a hard time seeing a connection if it does not appear reasonable. Intuition is not bothered by that and can find a connection by recognizing a pattern that is not immediately reasonable.

To see how this works, pretend that you are a detective who is asked to figure out what took place at the scene of an accident. You were not there yourself, and all you have to go on are some notes taken by someone else.

you be Columbo

Notes from the scene of an accident.

- Victims (one male, one female) found dead on the livingroom floor.
- Victims surrounded by water and glass.
- Victims did not drown.
- No blood observed at the death scene.

What happened?

If all you had were these notes, you might have trouble using reason to explain how these things are connected. To explain what happened, you need intuition to give you a different point of view. I won't tell you what happened, but I will give you one more note:

- The victims' names are Nemo and Dory.

That help?

so what?

You make conclusions all the time without thinking about it. If you have a hard time making a conclusion about something, it usually does not matter if you just give up and forget about it. And most of the time that is OK. But there are times when you need to take the effort to make a good conclusion:

- You may need to decide whether or not to do something that is very expensive.
- You may need to decide what career to pursue.
- You may be on a jury that needs to decide whether a person charged with murder is guilty or innocent.

It makes sense to make good conclusions about things that are not so important before you have to make a good conclusion about something that is. After all, you do not want to solo at Carnegie Hall before you have learned to play an instrument.

another thing
about good
conclusions

A good conclusion is potentially acceptable to someone else because you can give reasons why your conclusion is valid. And getting someone else to accept your conclusion can be *just* as important as making a good conclusion. For example, a lawyer defending a client in court tries to convince the jury to agree with the conclusion that his client is not guilty. By using an argument that explains how the evidence supports his conclusion, the lawyer shows why his conclusion is valid.

The jury is not asked to accept the lawyer's conclusion just because he says it is valid, but to examine the lawyer's argument to see if it makes sense. In this way, agreement is possible because others can decide for themselves whether your reasons are convincing.

Making a Good Conclusion: Finding Things

episode 1:
Rebecca's
dilemma



Rebecca and Laura are study buddies who are helping each other get through physical chemistry alive. If Laura does not understand something, Rebecca usually does. If Rebecca does not understand something, Laura usually does. If neither of them understand something, they are good at figuring it out together. Because it is getting close to Christmas, Rebecca wants to get Laura a present to show how much she appreciates her help. But she does not want to get her just anything. What to do? Rebecca asks her roommate Mona, an English major who has no use for the hard sciences, for some gift ideas.

MONA

You have a brain; figure it out.

REBECCA

But I don't know what she would like.

MONA

Then be a detective. Her room will tell you exactly what you need to know.

step one

Since Rebecca's intuition is not giving her a conclusion about something Laura would like, she needs to rely on reason to get started.

The first step in making a good conclusion is to *find* specific things about your subject.

episode 1
continued

REBECCA

How is her room going to tell me what I need to know?

MONA

By looking at her stuff to find out what she likes.

REBECCA

Huh?

MONA

Sherlock Holmes once figured out what kind of dog a man had just by looking at the man's walking stick.

REBECCA

So how do *I* do that?

MONA

Next time you go to her place to study, write down all the things you see.

REBECCA

How will I know if it is important or not?

MONA

Doesn't matter. Everything is important. Just be specific about what you write down.

REBECCA

What do you mean?

MONA

Write down exactly what you see. Don't write *book*; write *Jane Eyre*.

general/specific

Good conclusions depend on specific things. Here are some examples:

General	Specific
car	Lamborghini Gallardo
apple	Granny Smith
tree	Weeping Willow

Got it? OK, just for fun, fill in the empty spaces in the following table:

General	Specific
dog	Cavalier King Charles Spaniel
cat	Siamese
bird	
fish	
	Belgian Hare
	Black Widow
	Monarch
worm	
	Orangutan
horse	

If you do not know the proper name of a thing, you can still be specific if you use a short descriptive phrase. Little, yappy, white and brown puppy is more specific than just dog.

episode 2:
the list

Rebecca comes home from Laura's house; she shows Mona her list.

photo of guys in a boat
old glass doorknob
little jar full of small rocks
postcard of Golden Gate
Bridge
Legal Sea Foods card
CharlieCard
eucalyptus leaves
BART Blue ticket
SF MUNI bus transfer
photo of old house
clam shell
little jar full of old buttons

photo of cat
twig from a tree
old canning jar lid
broken piece of brick
large old nail
blue shoelaces
old jar lid

MONA

What is all this?

REBECCA

Some stuff on the shelf above her desk. It's full of stuff like that. I could have written down lots more, but I didn't have time.

MONA

Too bad. You are going to need more than this. But what you have already is interesting.

REBECCA

So what do I do now?

Making a Good Conclusion: Group Things

step two	Although some of the things on her list could be more specific, Rebecca has made a good start gathering things to think about. She will need more if she wants to make a good conclusion, but right now she can get started on the second step of the procedure: <i>group</i> the things that seem connected.
episode 2: continued	<p>MONA</p> <p>Look for the connections.</p> <p>REBECCA</p> <p>How?</p> <p>MONA</p> <p>Look for things that seem to go together.</p> <p>REBECCA</p> <p>How?</p> <p>MONA</p> <p>Start with one thing and then look for other things that seem to be connected to it.</p> <p>REBECCA</p> <p>Like the picture of the guys in a boat, and the cat, and the house?</p> <p>MONA</p> <p>What's the connection?</p> <p>REBECCA</p> <p>They are all pictures.</p> <p>MONA</p> <p>That's not the kind of connection you are looking for. That tells you what the things are, but it doesn't tell you anything about Laura. See the BART ticket and the MUNI transfer? What do they have in common that might have to do with Laura?</p> <p>REBECCA</p> <p>She's been on public transportation?</p> <p>MONA</p> <p>Where?</p>

REBECCA

San Francisco?

MONA

OK, so what else tells you that she has been in San Francisco?

REBECCA

The Golden Gate Bridge postcard!

MONA

Smart girl. Those are the connections you are looking for. It works best if you don't try to figure out how things are connected. Just look for things that seem to go together and figure out why later.

Rebecca takes a pen and marks a 1 next to the three things that show Laura had been in San Francisco. She selects another thing and finds more things on the list that seem to be connected to that. Rebecca does not get too far, but at least it is a start. Even though she is not sure why, she thinks that these things might go together:

- little jar full of old buttons
- old canning jar lid
- broken piece of brick
- large old nail
- old jar lid

Now her list looks like this.

photo of guys in a boat
old glass doorknob
little jar of small rocks
1 postcard of Golden Gate
Bridge
Legal Sea Foods card
CharlieCard
eucalyptus leaves
1 BART Blue ticket
1 SF MUNI bus transfer
photo of old house
clam shell
2 little jar full of old buttons

photo of cat
twig from a tree
2 old canning jar lid
2 broken piece of brick
2 large old nail
blue shoelaces
2 old jar lid

Rebecca does not see it yet, but there are some things on this list that suggest Laura has been in another city. Oh, and by the way, can you identify another thing that might belong to the list of “2” things that Rebecca started?

a conversation
with reason and
intuition

MAKING CONCLUSIONS: We are going to take a break now for a conversation with a couple of concepts that are responsible for making this chapter possible. Reason and intuition have been around for as long as folks have thought about thinking. Though often considered to be two different ways of making a conclusion, they are really complementary parts of the same process. To begin, I would like to ask each of you to comment on what you bring to the table when it comes to making conclusions.

REASON: Hi, this is reason talking. My short answer to your question is confidence. I provide confidence that a conclusion is valid.

INTUITION: In the same way, you could say that I provide a feeling of mistrust when a conclusion is not valid.

MAKING CONCLUSIONS: How so?

INTUITION: Have you ever made a conclusion that you thought was reasonable but still didn't feel quite right?

MAKING CONCLUSIONS: Yes. But I always thought that an intuitive conclusion might feel right even if it isn't reasonable.

REASON: Are you talking about thinking or feeling?

MAKING CONCLUSIONS: Both.

REASON: Two plus two is four. That is a valid conclusion. It doesn't matter how you feel about it.

INTUITION: Oh Reason, if life were as simple as two plus two, we could all stand up and go home right now. We're talking about making conclusions about real things. Where getting it right is important, like making a medical diagnosis or a verdict in a court of law. Even about what DVD to rent.

MAKING CONCLUSIONS: OK, Intuition. Take a deep breath and let's turn this conversation in another direction. Why do you guys think that reason and intuition are often considered to be opposites? Reason, let's start again with you.

REASON: Imagine two people buying the same kind of car. One person explains his choice by showing a long list of features that make that car worth buying. The other person just says he likes the car. The car in each case is the same. That is the simple difference between reason and intuition.

INTUITION: I feel that people are more confident with a reasonable conclusion because they can see how you made it. With intuition, there's nothing to see.

MAKING CONCLUSIONS: So you both agree that you can make a valid conclusion using either reason or intuition?

INTUITION/REASON: Certainly.

REASON: And you can also make an invalid conclusion.

MAKING CONCLUSIONS: I thought that reason was more reliable?

REASON: No. Not necessarily more reliable. As intuition observed, people often are more confident about conclusions made by reason, but that does not make reason more reliable. You only know whether a conclusion is any good if it continues to be reliable after you make it.

INTUITION: One reason why people don't trust intuition is that it looks too easy, like you didn't have to do any work to get the answer. Ironically, it seems that the more good conclusions you make with reason, the better your ability to use intuition will be.

MAKING CONCLUSIONS: How about an example?

INTUITION: No problem. I am sure that you have heard that medicine is an art as well as a science.

ME: Sure.

INTUITION: That simply means that an effective doctor will often suspect something is wrong even when all of the things like lab tests and examina-

tion results don't support that conclusion. Sometimes a feeling is more accurate than reason.

REASON: I am the first to admit that when things all seem to add up, I have a confidence that is sometimes undeserved.

INTUITION: Medical history is full of examples of people who have had a medical exam and were told that they were in good health only to die the next day because of something that the doctor could not see. The reverse is true as well. Sometimes a very ill person will go to a doctor and be told that he has only a short time to live—and then go on to live 30 more years.

MAKING CONCLUSIONS: Fortunately these are exceptions. Doctors couldn't stay in business if they didn't usually make good conclusions. And it takes both reason and intuition to make them. I want to thank you both for having this conversation.

REASON: My pleasure.

INTUITION: Any time.

episode 3:
a new strategy

Rebecca is excited about getting back to Laura's room so she can add more things to her list. But there is a problem. Rebecca does not want Laura to see what she is doing. As usual, Mona has a plan.

MONA

I'll give Laura a call after you get there and tell her that I need to ask her some questions about you so she will have to leave the room.

REBECCA

Just try to keep her talking long enough so I can write down lots of things that are on her shelf.

MONA

I have a better idea. Take my digital camera.

REBECCA

I should have thought of that before!

Everything goes according to plan and when Rebecca returns home, she has everything she needs to make a really good list. She downloads the pictures of the things on Laura's shelf and begins to notice something. Finding things seems easier this time for some reason. Rebecca quickly adds more things to her list. When she notices things that seem to be connected, she puts the same number next to them and continues to add to her list.

REBECCA

I still don't see how this is going to help me get something cool for Laura.

sidetrip:
find out what
Rebecca is
learning

Finding things about a subject is a skill that gets easier each time you do it. Rebecca is learning something about gathering things. I am not going to tell you what it is just yet. I want you to do something first. Just for fun, do the following two activities so you can appreciate what Rebecca is learning. It is much easier to understand how to do something when you do it yourself.

activity one:
gather things
about a subject

See how quickly you can fill the blank spaces in this table with names of movies..

activity two:
gather things
about a subject
using categories

This time, see how quickly you can fill the blank spaces in this table with names of food.

Breakfast	Lunch	Dinner

what Rebecca
learned

Did you find that it was easier to do the second activity than it was to do the first? You often find that having categories makes the task of gathering things easier. What categories could you use for the first activity to make it easier? Perhaps drama, action, comedy?

Earlier, when Rebecca identified some of the things she had gathered as pictures, she was right because that was one way those things were connected. But the category “picture” is not very useful in telling her anything about Laura. Even so, Rebecca finds using a category like picture helpful in making her list. Having the category *picture* in mind somehow makes it easier to notice all of the other pictures that are on the shelf.

One way to create categories to make finding things easier is to do something that journalists do when they are gathering information for an article. A journalist asks:

- who?
- what?
- when?
- where?
- how?
- why?

In the second activity, the categories breakfast, lunch, and dinner all have to do with *when* food is eaten. Different categories can also be made based on *what* kind of food: meats, grains, fruits, vegetables. Or on *how* the food is prepared: fried, boiled, baked, or steamed.

The whole point is to give yourself enough categories so that you have lots of hints to make finding things easy.

episode 4:
more things

When Rebecca has finished listing the items on Laura's shelf, she has quite a few things to sort.

photo of guys in a boat
old glass doorknob
little jar of small rocks
1 postcard of Golden Gate
Bridge
Legal Sea Foods card
CharlieCard
eucalyptus leaves
1 BART Blue ticket
1 SF MUNI bus transfer
photo of old house
clam shell
2 little jar full of old buttons

photo of cat
twig from a tree
2 old canning jar lid
2 broken piece of brick
2 large old nail
blue shoelaces
2 old jar lid
dirty rubber ball
gold and blue pen
picture of the
inside of a school
locker

small bottle full of sand
postcard of the Zakim
Bridge
box of fish hooks
MBTA Rail Schedule
picture of a boat with
a big swan on it
cloth name labels
seed bead bracelet
smooth black stone
tiny clay bowl
piece of dried seaweed
police whistle
dried daffodil

brass ring
three gray feathers tied
together with thread
blue ribbon tied in a bow
SFMOMA postcard
matches from Alioto's
Restaurant
red glass ball
dried crab claw
small plastic lobster
blue bandanna
picture of turtles
in the water

While Rebecca is adding things to her list, she notices that the old glass doorknob and the photo of the old house probably belong to the 2 group, so she marks both with a 2. Because her computer is on, she googles Alioto's Restaurant and finds that it is in San Francisco, so she marks that with a 1. She also googles Legal Sea Foods (another restaurant) and finds that many of them are in Massachusetts. Googling MBTA tells her that it has to do with the Massachusetts Bay Transit Authority, and that connects to the CharlieCard. So she starts a 4 list of things that have to do with Massachusetts. After she has finished sorting the things that seem connected, Rebecca's list looks like this:

photo of pups in a boat
2 old glass doorknobs
3 little jar of small rocks
1 postcard of Golden Gate
Bridge
4 Legal Sea Foods card
4 CharlieCard
3 eucalyptus leaves
1 BART Blue ticket
1 SF MUNI bus transfer
2 photo of old house
3 clam shell
2 little jar full of old buttons

photo of cat
3 twig from a tree
2 old canning jar lid
2 broken piece of brick
2 large old nail
blue shoelaces
2 old jar lid
dirty rubber ball
gold and blue pen
picture of the
inside of a school
locker

3 small bottle full of sand	2 brass ring
4 postcard of the Zakim Bridge	3 three gray feathers tied together with thread
box of fish hooks	blue ribbon tied in a bow
4 MBTA Rail Schedule	1 SFMOMA postcard
picture of a boat with a big swan on it	1 matches from Alioto's Restaurant
cloth name labels	red glass ball
seed bead bracelet	3 dried crab claw
3 smooth black stone	small plastic lobster
tiny clay bowl	blue bandanna
3 piece of dried seaweed	picture of turtles in the water
police whistle	
3 dried daffodil	

Later, Rebecca shows her list of things to Mona.

MONA

Quite a collection.

REBECCA

Yeah, I found some more San Francisco things: the SFMOMA postcard and the matches from Alioto's Restaurant.

MONA

What is the 2 list about?

REBECCA

I think that they all have to do with the picture of the old house. They all seem like things that would be found in an old house like that.

MONA

What about the rubber ball?

REBECCA

It wasn't old, just dirty. It looked like it had been used to play fetch with a dog.

MONA

It's OK if you don't have everything in a group at first. Sometimes you see how they fit in after you understand the groups better.

REBECCA

Maybe they aren't part of any group, just random things.

MONA

Maybe, but don't be quick to decide that something is just a random thing. And don't be certain that the first group you think of is going to be useful. What is the 4 list?

REBECCA

They have to do with Massachusetts. I googled Legal Sea Foods and found out that there are a lot of them in Massachusetts. The CharlieCard was easy because it says Massachusetts Bay Transit Authority on the front. So that makes the MBTA Rail Schedule also part of the group. And when I googled Zakim Bridge, I found out that it's also in Boston.

MONA

Why don't you just call the list Boston instead?

REBECCA

Well, the bridge is the only thing that has to do with Boston. Everything else has more to do with Massachusetts.

MONA

I see another Boston thing you missed.

REBECCA

What's that?

MONA

The picture of the swan boat.

REBECCA

What's that? I thought it was just some random picture.

MONA

Didn't your mom ever read you *Make Way for Ducklings* when you were a kid?

REBECCA

What's that?

MONA

You had a deprived childhood. It is a book by Robert McCloskey.

REBECCA

Not really. We were just more of a *Blueberries for Sal* sort of family.

MONA

Anyway, in *Make Way for Ducklings*, a family of ducks stay for a while at the big park in Boston where there is a lake where you can go for a ride on a swan boat. The ducks see one of the swan boats go by and think it's a real bird.

Rebecca marks that thing with a 4.

MONA

What is the 3 list?

REBECCA

I think that these are all things she found when she went on nature walks or something.

MONA

But where?

REBECCA

Wherever.

MONA

There are lots of eucalyptus trees in San Francisco.

REBECCA

Right.

(Rebecca replaces the 3 with a 1.)

MONA

The crab claw probably also belongs to the San Francisco list.

REBECCA

Why?

MONA

You have a plastic lobster on the list. You also have two seafood restaurants: one in Boston and one in San Francisco.

REBECCA

So?

MONA

Crabs are a big deal in San Francisco, and lobsters are a big deal in Boston. She probably saved the claw from the crab she ate at Alioto's and forgot to



save anything from the lobster she ate at Legal Sea Foods. So she bought a little plastic lobster instead.

REBECCA

How do you know?

MONA

Just a guess, but it seems to make sense. And now we know something else about Laura.

REBECCA

She likes shellfish!

MONA

Exactly.

Making a Good Conclusion: Identify Groups

step three

Rebecca has already gotten off to a good start with the third step of the procedure for making a good conclusion: *identify* what each group has in common.

reviewing
Rebecca's work

It is easier to see where Rebecca is now by making a new list of the things she has already identified. You do not have to do this when you are working on a list of your own, and there are good reasons not to. But reorganizing the groups makes it easier for you to see where she is in the procedure.

1 San Francisco	2 from old house?	3 from nature walks?	4 Boston
postcard of Golden Gate Bridge	old glass doorknob	little jar of small rocks	Legal Sea Foods card
eucalyptus leaves	photo of old house	clam shell	CharlieCard
Bart Blue ticket	little jar full of old buttons	twig from a tree	MBTA Rail Schedule
SF Muni bus transfer	old canning jar lid	small bottle full of sand	picture of a boat with a big swan on it
SFMOMA postcard	broken piece of brick	smooth black stone	small plastic lobster
matches from Alioto's restaurant	large old nail	piece of dried seaweed	postcard of the Zakim Bridge
dried crab claw	old jar lid	dried daffodil	
	brass ring	three gray feathers tied together with thread	

That leaves these things unaccounted for:

- photo of guys in a boat
- photo of cat
- blue shoelaces
- dirty rubber ball
- gold and blue pen
- picture of the inside of a school locker
- box of fish hooks
- tiny clay bowl
- police whistle
- blue ribbon tied in a bow
- red glass ball
- blue bandanna
- picture of turtles in the water

The task is to identify what each group of things has in common. Each group should be able to tell us something about Laura. So far, it seems that Laura has been to San Francisco and Boston. The things from the old house might be from a place where Laura spent some time. At this point in the procedure, things can shift around a lot because in identifying groups, you discover new connections and that can start the grouping process all over again. And when you come to the point where you do not know what else to do, you may see a new connection that comes like a surprise and has you resorting your things once again.

episode 5:
new discoveries

Rebecca looks at her list and notices the clam shell. If Laura likes crabs and lobsters, she probably also likes clams. But does the clam go in the San Francisco group or the Boston group? Because it really does not matter, she decides to put it in the San Francisco group. Rebecca looks at the things that do not seem to belong to any group. She notices the picture of a school locker.

REBECCA

I wonder if that is a picture of her locker from high school?

It is hard to see much detail, but from what she can see, it looks like it is packed full of so much stuff that you could not put a single thing more into it. Then Rebecca notices something on the inside of the locker door—a blue ribbon tied in a bow.

REBECCA

So now it seems I have a new category: high school stuff.

Rebecca tells Mona to come see what she has found.

REBECCA

See? The blue bow in the locker is the same as the one on the shelf.

MONA

That might also explain the blue bandanna.

REBECCA

Just because it is blue?

MONA

No. School colors. You have blue shoelaces, too.

REBECCA

OK. High school stuff: locker, blue bow, bandanna, shoe laces...

MONA

And the gold and blue pen.

REBECCA

Why?

MONA

Just seems like another school thing. Gold and blue might be school colors.

REBECCA

OK.

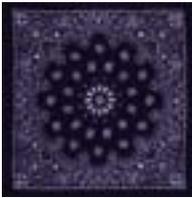
MONA

I think you have enough to go on to the last step.

REBECCA

But there is still lots of stuff I can't put in a group.

MONA



Don't matter. You're not solving a crime, you're just trying to figure out what to get her for Christmas.

Making a Good Conclusion: Conclude

step four The last step in the procedure is to *conclude* what all of the groups have in common. In this case, Rebecca needs to figure out what all of the groups tell us about Laura.

episode 5
continued

REBECCA

So what do I have to do now?

MONA

Figure out what all of the groups tell you about Laura.

REBECCA

Boston and San Francisco show that she has been to those places. Maybe she also went to some old house where those things seem to be from. And the high school things were things from high school. And the rest are just random things that she has for some reason.

MONA

But what do all of these groups of things say about Laura?

REBECCA

I don't know. That she collects stuff?

MONA

But what kind of stuff?

REBECCA

Oh, from places where she's been!

MONA

What kinds of places?

REBECCA

Maybe from places that she likes.

MONA

That seems to make sense. And it would also explain why the rest of the things that seem to be random are really not random. They probably have to do with one of the places that you've identified.

REBECCA

The picture of the turtles might be from Boston at the park where the swan boats are.

MONA

It's possible.

REBECCA

So how does all this help me to figure out what to get her for Christmas?

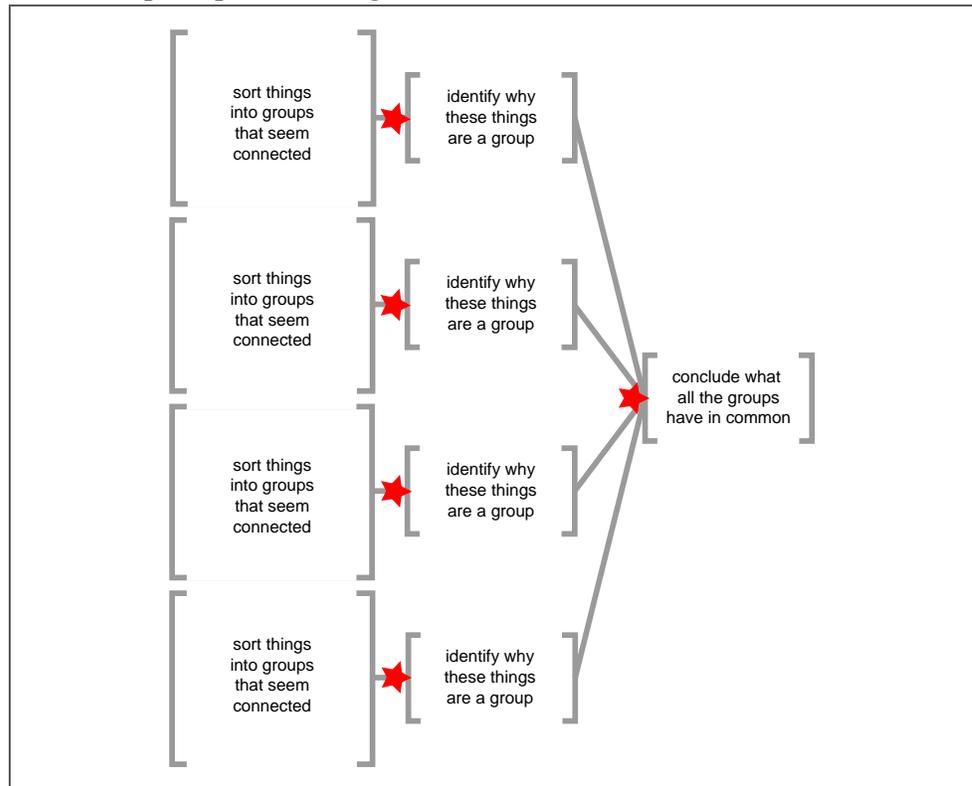
MONA

I have an idea. Let's go shopping.

using a graphic organizer

From all of the things that are on Laura's shelf, Rebecca concludes (with some help from Mona) that Laura collects things from places that are special to her. Although it seems obvious now, it was not at all obvious when she began the procedure. And because it is a conclusion that is based on things, there are reasons for the conclusion if you ever have to explain it.

Another way to look at the process of making a conclusion is to see each of the steps as part of a diagram that shows how the conclusion is made.



The procedure is like putting the pieces of a puzzle together, only you do not have any pre-cut pieces to work with. Instead, you have to decide whether two pieces fit together or not based on whether there seems to be a

connection. You know that you are making progress when you can identify a group of things by giving it a name. Identifying how a group of things are connected requires intuition to recognize a pattern in the group. This is also true in making a conclusion about how all the groups are connected. It takes a flash of insight to get from one place to the next.

The only way you know whether your conclusion is valid is to see how well the the name you give each group explains the things in the group and how well your conclusion explains how the groups are connected.

The diagram not only shows how a conclusion is made, but can also be used to make a conclusion. Before I show you how to do that, let's catch up with Mona and Rebecca who have gone shopping.

episode 6:
the perfect
present

REBECCA

What is this place?

MONA

Sort of an army surplus store, only the stuff here is from companies who got rid of supplies they no longer needed.

REBECCA

Who buys this stuff?

MONA

Don't know. Maybe we will.

REBECCA

What are we looking for?

MONA

Something that Laura would like.

REBECCA

How will we know what that is?

MONA

Well, we know that she likes to collect things that seem to have something to do with places that are probably special to her for some reason.

REBECCA

And?

MONA

What would someone who collects things like to have?

REBECCA

Oh wow! Something to put the things in.

MONA

That's what I'm thinking.

The girls go off in different directions to look for storage possibilities. For a while, it seems like everything in the store is intended for something else, but then Rebecca turns a corner and sees exactly what she has been looking for. There is a whole shelf of them. She goes back to find Mona.

REBECCA

Hey Mona! I found what we are looking for.

MONA

Where?

REBECCA

Follow me.

When they get to the place where Rebecca had been, Mona is pleased.

MONA

That is just so cool.

What Rebecca found were some interesting looking storage jars. Just the right size for Laura to put her collections in.

REBECCA

And they are cheap, too. I can get five for less than ten dollars.

MONA

Don't think you need that many. Four should be enough.

REBECCA

But I have five groups.

MONA

But four of the groups seem to be about specific places. The nature walk group things probably have to do with the other groups.

REBECCA

But what if they don't?

MONA

Just get four jars. If I'm wrong, I will buy another jar.

REBECCA

OK. I can hardly wait to see what Laura thinks.

episode 7:
what if you're
wrong?

Back at their place, Mona helps Rebecca wrap the jars.

REBECCA

I really hope you are right about four jars being enough.

MONA

It won't be the end of the world if I am wrong. And you can blame me if I am. I just have a feeling that four is exactly right.

REBECCA

Hope so.

episode 8:
what a great
present!



Rebecca and Mona are at Laura's place. Laura is busy opening her presents.

LAURA

I just can't believe you. What a great present! And exactly the right number too.

REBECCA

I had some help.

MONA

We figured out that you collect things.

LAURA

Yeah. I've been doing that since forever. Nothing I collect is valuable or anything. It's just stuff that reminds me of something.

REBECCA

We also figured out that the things in your collection are from four different places.

LAURA

Uh huh.

REBECCA

So San Francisco and Boston are two of the places?

LAURA

Uh huh. I have an aunt who lives in San Francisco and another who lives in Boston. Each summer since I was six, my mother and I spent a week with each one.

MONA

And one of the other places must be your school.

LAURA

Yeah.

REBECCA

Was there an old house, too?

LAURA

Yeah. My grandparents' summer house. We go there for at least three weeks each summer.

REBECCA

There were a few things I couldn't figure out. What's special about the blue and gold pen?

LAURA

That's my test taking pen. I used for finals all the way through school.

REBECCA

What's the clay bowl about?

LAURA

That's another school thing. I had an English teacher my freshman year who had us make a clay pinch pot and turn it in before the end of the quarter. Then he put all of them on a table and had us guess who had made each one.

REBECCA

Could you do it?

LAURA

Some were easy. Some were hard. Got a lot of them right, though.

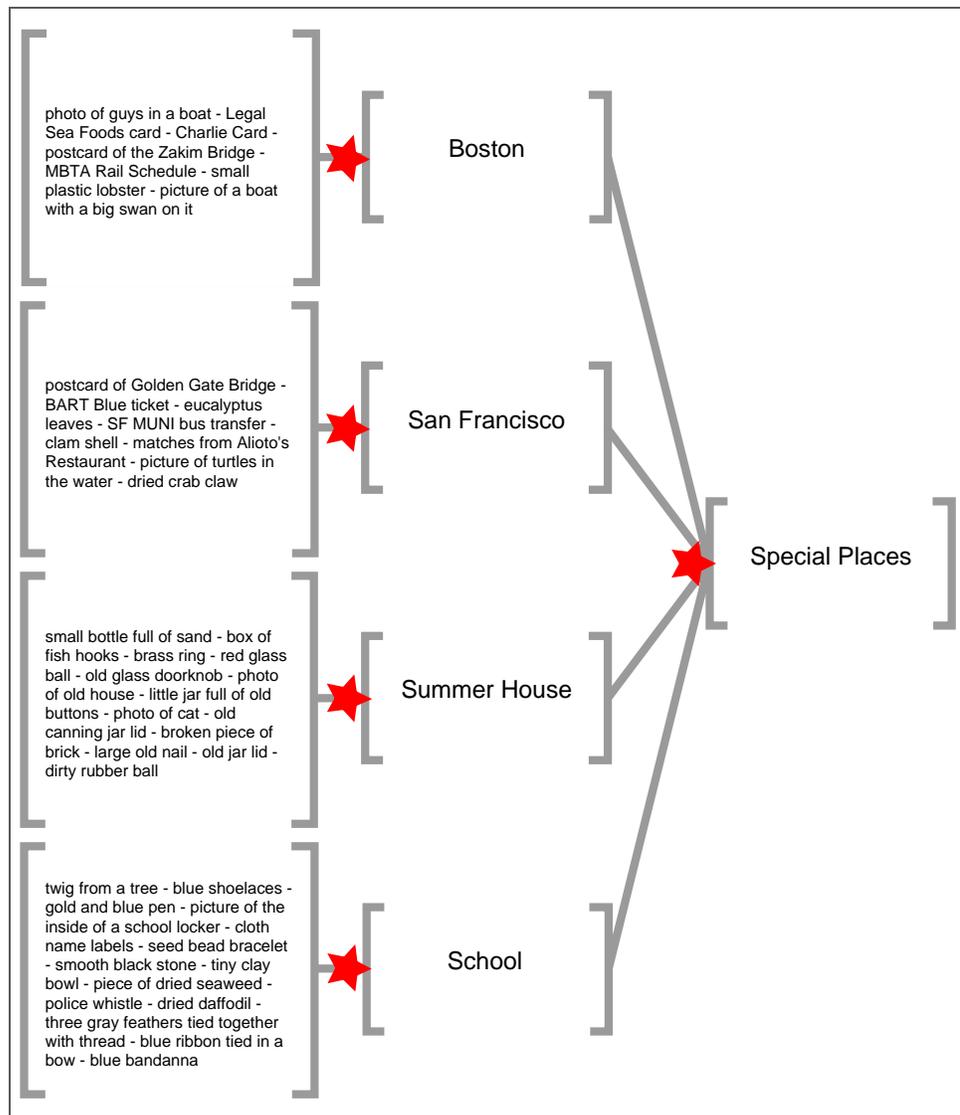
MONA

I just love doing stuff like that.



using a graphic
organizer
continued

I am going to keep the promise I made a while ago about showing how you can use a graphic organizer to make a conclusion. After Laura had unwrapped all of her jars, she put her things into each jar according to where they were from. There were quite a few surprises. This diagram shows the groups according to Laura.

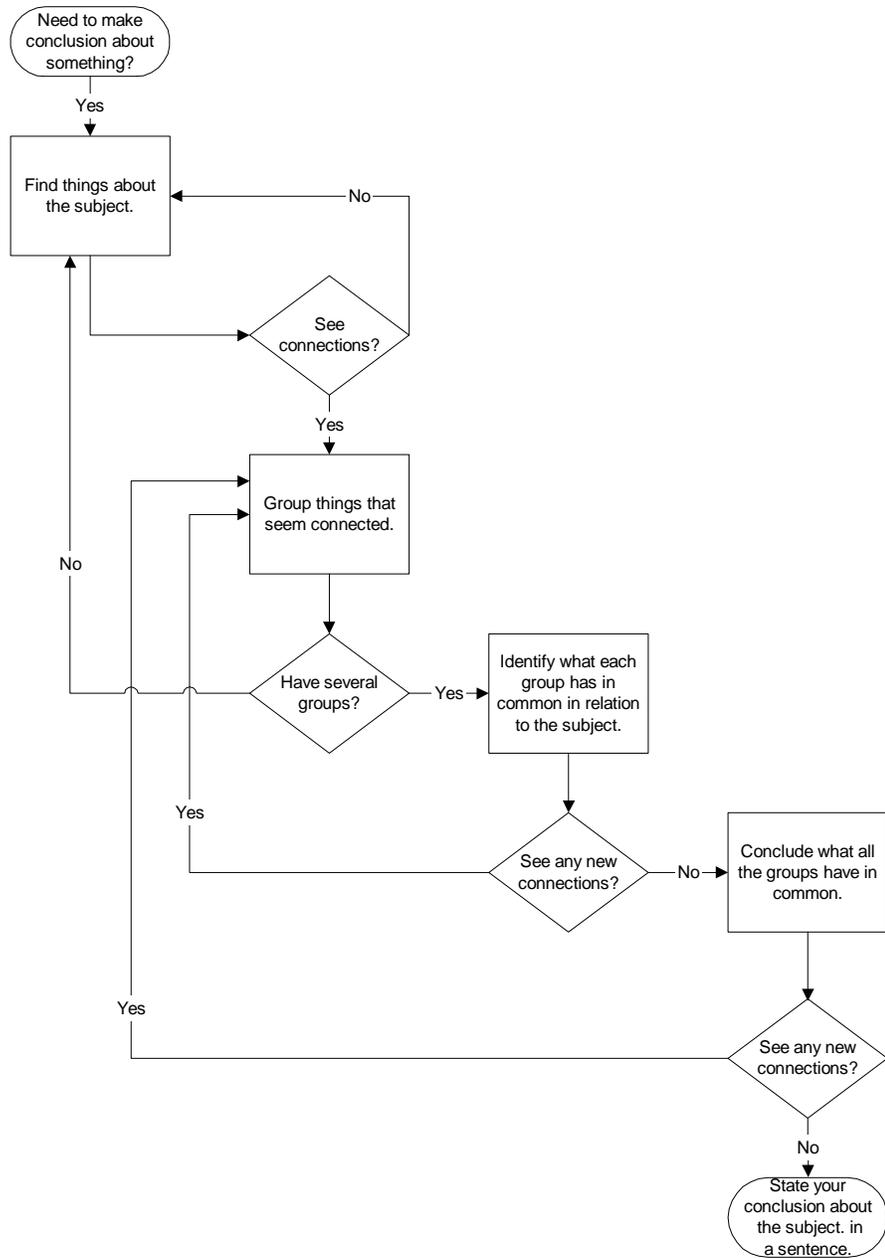


Some find it helpful to put their things into a graphic organizer because it is easier to see the relationships among the things, the groups, and the conclusion. However you choose to find, group, identify, and conclude, you need to be able to switch things around quickly as you become aware of different connections. It is natural to want to keep things together that seem to be a group, but it is important not to be in a rush to finish. The more you are open to looking for different connections, the better your final conclusion will be. Sometimes you don't become aware of a connection until you spent some time grouping your things. It also helps to put everything aside for a while and come back when you have had a chance not to think about it for a while.

one more way of looking at the procedure

The procedure of making sense is actually more like things you do again and again until you come to a conclusion that is reasonable and satisfying.

Instead of four steps where you complete the one step and then go on to do the next, the process is really more like the way it is shown in the following diagram.



You go from finding to grouping to identifying and then perhaps to grouping and identifying again until you get to concluding, but even then you can become aware of a connection that you had not seen before, and so you go back to grouping again. It is a procedure that you cycle through until you feel that you have a conclusion that is good.

some concluding
thoughts

You do not have to wait until you are faced with a life or death situation before going through the effort to make a good conclusion. Something as simple as figuring out an appropriate gift for someone can provide you with the opportunity to make a conclusion that can make a difference.

After her experience in finding a gift for Laura, Rebecca will probably never look at someone's room in quite the same way as she did before. Now someone's room will be an interesting collection of things that say something about a person's values, interests, and personality.

There are any number of things that are worth the effort to make a good conclusion about. Once you start making good conclusions, you will find it hard to stop. But that is a good thing.