



Pearson

SURPRISOLOGY engineering the unexpected in the classroom

Magdalena Kania



Group → 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

↓ Period

The Periodic Table of the Elements

1	1 H																2 He	
2	3 Li	4 Be										5 B	6 C	7 N	8 O	9 F	10 Ne	
3	11 Na	12 Mg										13 Al	14 Si	15 P	16 S	17 Cl	18 Ar	
4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
6	55 Cs	56 Ba		72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
7	87 Fr	88 Ra		104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og

Lanthanides	57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu
Actinides	89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr

A new element has been discovered!

63.546 47 Cu	65.39 48 Zn	69.723 49 Ga	72.61 50 Ge	74.92 51 As
107.87 47 Ag	112.41 48 Cd	114.82 49 In	118.71 50 Sn	127.60 51 Sb
196.97 79 Au	200.59 80 Hg	204.38 81 Tl	207.2 82 Pb	208.98 83 Bi
272 111 Rg	294 112 Ah!			
64 Cd	65 Tb	66 Dy	67 Ho	68 Er

The Element of Surprise

The background is a solid teal color with a repeating pattern of two types of icons: a molecular structure consisting of a central circle connected to three smaller circles, and a simple smiley face. A large white circle is centered on the page.

AH!

???

What is surprise?

A. An emotion

B. A mental state

**Where do you feel
surprise in your body?**

A. Stomach

B. Chest

C. Face

How do you look when you are surprised?

- A. Bulging eyes
- B. Gaping mouth
- C. A and B
- D. None of these

How often do you feel surprised?

A. Rarely

B. Occasionally

C. Often

D. Every day



The background is a solid teal color with a repeating pattern of light teal molecular structures and smiley faces. The molecular structures consist of a central circle connected to three smaller circles, and the smiley faces are simple curved lines. In the center, there is a large white circle containing the text.

Surprise Sequence

1
**Freeze
Phase**
aka
The Duh Face





2
Find
Phase



3

**Shift
Phase**

4

Share Phase



The end
not yet

SURVEY

Things my students pay attention to:

-

-

-

Things my students don't pay attention to:

-

SURVEY

Things my students pay attention to:

- when I get my nails done

-

-

Things my students don't pay attention to:

-

SURVEY

Things my students pay attention to:

- when I get my nails done
- when I change my phone case
-

Things my students don't pay attention to:

-

SURVEY

Things my students pay attention to:

- when I get my nails done
- when I change my phone case
- when I bring a new game

Things my students don't pay attention to:

-

SURVEY

Things my students pay attention to:

- when I get my nails done
- when I change my phone case
- when I bring a new game

Things my students don't pay attention to:

- anything academic related

There is no
bad memory.
It's just
lack of ATTENTION

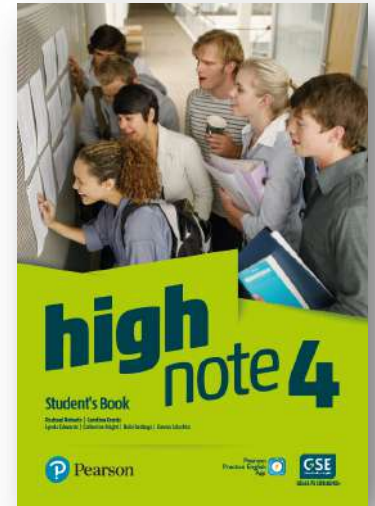
P. Bąbel, M. WIŚniak; '12 zasad skutecznej edukacji'



- 5 Rewrite the sentences as generalisations using the words in brackets.

Generation Z (or Gen Z): people born from 2001 onwards

- 1 Generation Z spend a lot of time online. (general)
- 2 They use Instagram rather than Facebook. (whole)
- 3 They take offence very easily. (tend)
- 4 They have an entrepreneurial spirit. (nine)
- 5 They like getting a bargain. (cases)
- 6 They are into experiences rather than material possessions. (extent)
- 7 They avoid clicking online ads. (more)
- 8 They are into healthy eating and good habits. (broadly)
- 9 Generation Z tend not to take too many risks. (tendency)
- 10 They live much of their lives online. (overgeneralisation)



Jean M. Twenge, PhD
author of *Generation Me*

iGen



Why Today's
Super-Connected
Kids Are Growing Up
Less Rebellious, More
Tolerant, Less Happy—
and Completely
Unprepared for
Adulthood*

*and What That Means for the Rest of Us

FILMIK





**ATTENTION
DESIGNERS**

And you will read this last

**You will read
this first**

And then you will read this

Then this one

DESIGN LESSONS

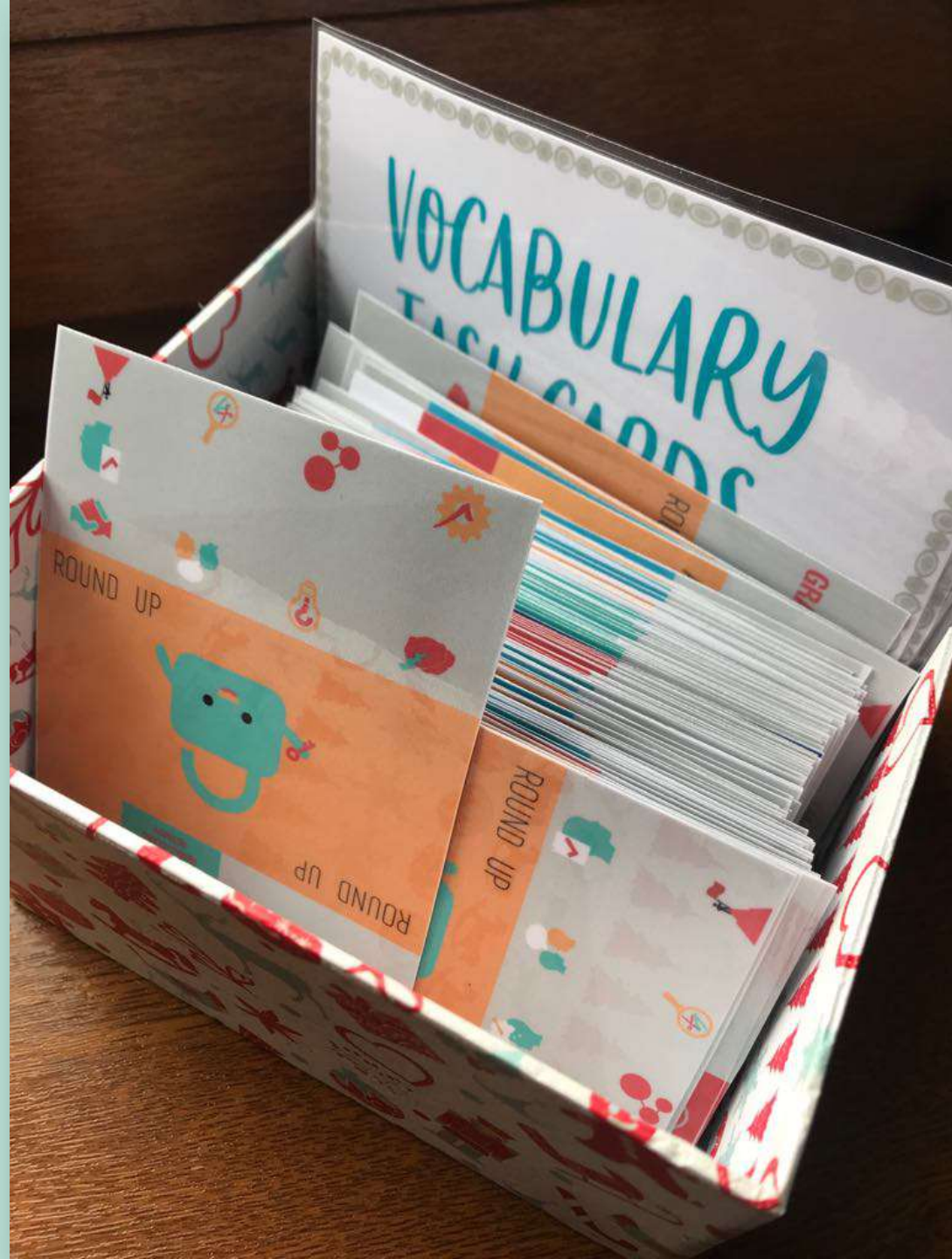
with

ATTENTION

in mind



SURPRISE
yourself



Box of randomness

THE EXPLANATION BINGO



10 - 20 MIN



INDIVIDUAL
ACTIVITY

ACQUIRING



ACQUIRING



ACQUIRING

THE EXPLANATION BINGO



Each student receives a bingocard. On the bingocard various terms and persons can be found that correspond with the subject of the lesson. During the explanation of the teacher, the students will have to pay attention to everything that is being said. Once they hear a term or person that corresponds with the terms and persons that can be found on their bingocard, they can cross out this word. Once a student has crossed out all the words on their bingocard he can call out a BINGO! When the student has a valid bingo you can let them win a little prize. This can be anything: from a privilege in class to a piece of fruit or candy.



WWW.THEACTIVECLASS.ORG

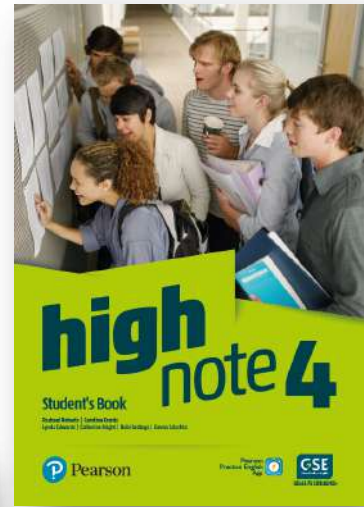
ACQUIRING

- 1 The human finger is so sensitive that it is capable of detecting a surface bump only 0.0001 mm high – the diameter of a bacterial cell. By contrast, the human eye cannot detect anything smaller than 0.01 mm.
- 2 Rhinoceroses are so **short-sighted** that they are unable to **tell** a person and a tree **apart** from a distance of five metres.
- 3 Men have a **keener sense of smell** than women.
- 4 Around twenty-five percent of people are 'supertasters'. Supertasters have more **taste buds** than the average person, which means they have a particularly **sensitive**

Fascinating facts about the FIVE SENSES

levels can reach 120 decibels, can cause hearing loss in 7.5 minutes.

- 9 It is not possible to **perceive** smells while you are asleep.
- 10 Elephants use infrasonic sound to **communicate**. These low frequency sounds, which are not audible to humans, enable elephants to **make out** sounds from 285 kilometres away.
- 11 Males are much more likely to be **colour-blind** than females.
- 12 Seeing sounds, hearing colours and tasting words are examples of what happens when somebody has synaesthesia, a brain condition which creates connections between the senses.



BINGO or GOT IT!

short-sighted	tell apart	taste buds
sensitive palate	eyesight	hearing loss
perceive	make out	colour-blind

Transient
attention
=
getting
attention



Sustained
attention
=
keeping
sb's attention



Tools for getting and keeping attention:

- interrupting patterns
- creating knowledge gaps
- producing predictable unpredictability
 - unfolding mystery
 - ??

Tools for getting and keeping attention:

- interrupting patterns
- creating knowledge gaps
- producing predictable unpredictability
 - unfolding mystery
 - surprising students

Pattern Interrupt

OMG!

How cute!

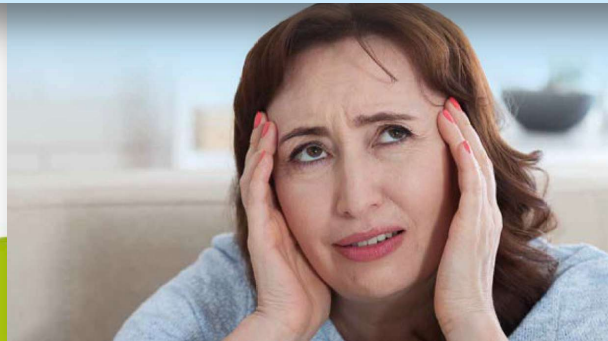
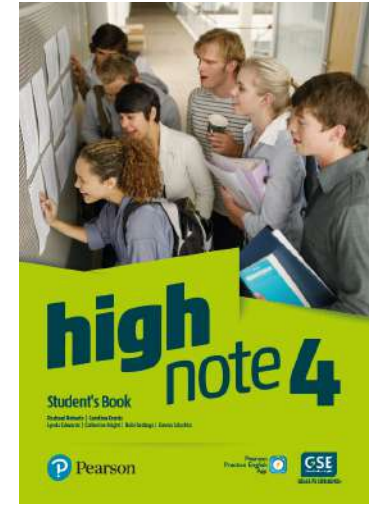
I knew it!

DOES INTUITION REALLY EXIST?

Meet two readers who believe they've experienced it.

Have you ever had a moment where you 'just knew' what was going to happen, or what you should do? Intuition is when we know something without having to work it out, from deep inside our subconscious mind.

Take Megan Smith's story, for example. When she was little, she went with her dad and little sister to the toyshop. Her dad bought her a toy she had been longing for and she was so excited when they got home that she stayed in the car to play with it while the others went inside. 'Suddenly,' she said, 'I had an overwhelming urge to get out of the car and go into the house.' So she did. Just as well, because no sooner had she gone inside than the wind started blowing so hard that an enormous tree branch fell onto the car, exactly where she had been sitting only moments before!



Knowledge gaps

1. What colour is it?
2. Why is it this colour?
3. Who made it?
4. Why was it made?
5. What can I do with it?
6. How else can I use it?
7. Where does it take me?
8. How much does it weigh?
9. Who is that guy?
10. Where can I get it?

FEDERAL RESERVE NOTE

THE UNITED STATES OF AMERICA

THIS NOTE IS LEGAL TENDER FOR ALL DEBTS, PUBLIC AND PRIVATE

F 23214550 K

WASHINGTON, D.C.

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E3 6



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6 Anna Escobedo Cabral

SERIES 2006

Henry M. Paulson Jr.

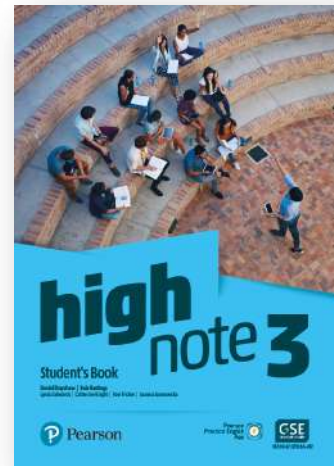
6

Treasurer of the United States.

Secretary of the Treasury.

WASHINGTON ONE DOLLAR

- 1 In groups, discuss the sayings. What do you think they mean? How true are they?
- Money doesn't grow on trees.
 - A fool and his money are soon parted.
- 2 Read sentences 1-8 and try to work out the meaning of the highlighted phrases. Then choose the correct definition for each one.
- 1 My sister **spends money like water**.
- spend money without thinking
 - be careful with money
- 2 How can I finish developing my app? I've **run out of money!**
- go to the bank quickly
 - have no money left
- 3 Sometimes I wonder if you think we're **made of money!**
- be very generous
 - be very rich
- 4 I'm a bit **short of money** right now. Can I borrow twenty quid?
- not have much money
 - have enough money
- 5 Look at the car he's driving. He must **be rolling in money!**
- be quite poor
 - be very rich
- 6 My dad believes in **getting his money's worth**; he hates getting ripped off.
- pay what you should and no more
 - avoid paying
- 7 A tiny minority of people in the world **have money to burn**.
- be very rich
 - dislike money
- 8 **Have you got any money on** you?
- wear expensive clothes
 - have cash with you
- 3 **3.15** In pairs, think about the meaning of the highlighted words and phrases. Then match sentences 1-8 in Exercise 2 with sentences a-h below. Listen and check.
- But I wouldn't say he's **mean**, just **careful with money**.
 - No, he isn't. Actually, he's got huge **debts** and his company is **in the red**.
 - Not much. Just some **loose change**.
 - Sometimes I think she **has more money than sense**.
 - Sorry, I can't lend you a penny. I'm **broke**.
 - I can think of two ways to **raise money**: one - **take out a loan**; two - try **crowdfunding**.
 - While almost half the world's population **live in poverty**. It's not right!
 - You know we can't **afford** a holiday in Florida so stop going on about it!
- 4 **SPEAKING** Use the vocabulary in Exercises 2 and 3 to complete sentences 1-9 with one word in each gap. In pairs, discuss the questions.
- Do you spend money like water or are you careful _____ money?
 - What do you usually do when you _____ out of money?
 - Do you always check your _____ after buying something?
 - What can you do if you want to buy something you can't _____?
 - If you had _____ to burn, what would you buy first?
 - Have you ever felt you didn't get your money's _____? Tell me about it.
 - Do you think most teenagers believe their parents are _____ of money?
 - Do you know of anyone who's _____ money through crowdfunding? Who? What for?
 - Think of a celebrity who is rolling _____ money. Do you think he/she has more money than _____? Why?
- 5 **REFLECT | Society** People often say that money can't buy happiness ... but it helps. Do you agree? Discuss in groups.



1. What colour is it?
2. Why is it the root of all evil?
3. Who designed it?
4. Why was it made?
5. What can I do with it?
6. How else can I use it?
7. Where does it take me?
8. How much does it weigh?
9. What happens if I don't have any?
10. Where can I get it?



careful with money



short of money



take out a loan



spend money like water



roll in money



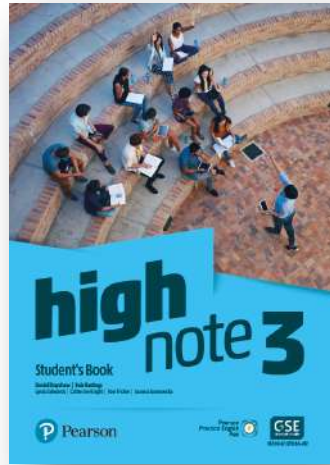
have money to burn



loose change

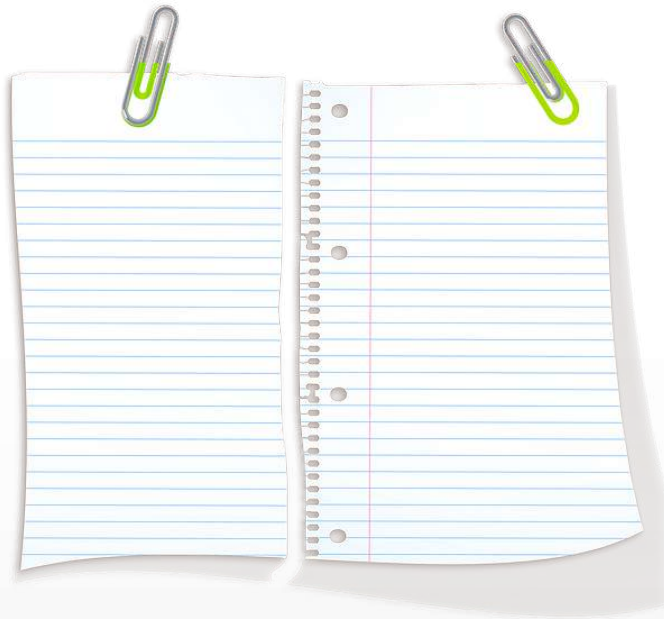


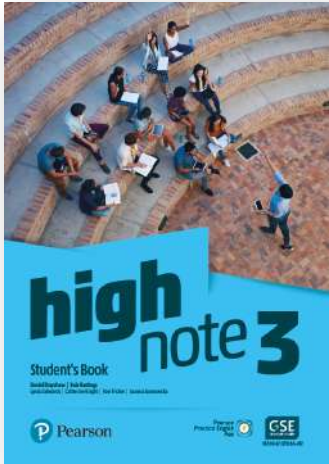
in the red



Predictable
unpredictability

I'll show you
what's on the other side
as soon as
you catch the phrase
„end up with“





R: And of course, if you don't get any work, you don't get any money.

MC: Yes. Unpaid shifts are becoming more common, too. That's when you agree to work for a certain time, a day or a week, for no payment.

R: That sounds good for the employer but what's in it for the worker?

MC: Well, you have the opportunity to show that you're the right person for the job, which is good. And you might end up getting the job, which is better. But you could end up with no money and no job at the end of your shift, and that's not so good.

R: The gig economy isn't all negative, is it?

MC: Of course not. There are advantages. For a start, you get a lot of work experience in all sorts of jobs. And if you work freelance, it may not be necessary for you to commute, you may be able to work from home. Instead of a routine nine-to-five job, you are your own boss. You're free to decide when and where to work.

R: Like a musician playing gigs?

MC: Exactly. However, as most musicians will tell you, you don't turn down gigs because you never know when the next one will come

S2: We're going to speak against the motion that a vegan diet is beneficial for everyone. First, I will talk about the dangers to our health. I shall also argue that a vegan diet is not necessarily good for the environment. The next speakers will explain why it is also impractical and rather unnatural. To begin with, a strict vegan diet is hardly a healthy way to eat, so it's difficult to imagine that it's an eating plan we should all adopt. It is almost impossible to get all the important nutrients, especially proteins and some vitamins, on a diet that is based on plants alone. New studies confirm that vegans often suffer from various health problems such as memory loss, dry skin, or tiredness. They also need to take lots of supplements and plan their meals very carefully. We are convinced that what we need to be healthy is a balanced diet which includes plants as well as animal products. My second argument is about the environmental impact of a vegan diet. More and more people go vegan because they are concerned about the environment. However, they rarely ask the question where all the exotic fruit and vegetables they buy come from. The problem is that many of these foods such as avocados, mangoes, goji berries or quinoa need to be transported from different parts of the world, which increases CO₂ emissions. So, in fact, buying a burger which comes from a local farm is much better for the environment than eating an avocado that travelled from another part of the world! To conclude, let me stress that a vegan diet can not only be dangerous to human health, it also has some environmental costs.

Unit 5

5C GRAMMAR

2.19 Exercise 2, page 66

N = Natalie T = Tom D = The Dean

N: Tom! Sorry! What time is it? 8.45? So I'm only fifteen minutes late!

T: Morning. You're always fifteen minutes late! I told you 8.30 on purpose.

N: You know me so well. Coffee? The café opens at nine o'clock.

T: I'm sorry to disappoint you but at nine we'll be listening to the welcome speech. It starts in five minutes.

N: Hmm. 9.15 then?

T: I'm afraid we won't be drinking coffee at 9.15 either. According to my plan, at 9.15 we'll be exploring the campus and the library. The tour starts at ten past.

N: After that?

T: I'm going to queue for the talk on Veterinary Medicine.

N: Wow! You've got it all planned out, haven't you? Will they be doing other subject talks at 10?

T: You want English Literature, right? Let's have a look. Yep, also at 10. Room 141.

N: Perfect. What would I do without you, Tom?

T: Ha! So we'll have finished the talks by 11 and we could go for coffee.

N: What a great idea! I'll have had enough of open day by eleven o'clock anyway.

T: Had enough? Are you joking? It's the sports facilities at 11.30, followed by lunch. Then at one o'clock, I want to visit the information desks and talk to a student ambassador. Then at two we're touring the halls of residence.

N: What? I thought this was basically a day off!

T: Shh. It's starting.

D: Ladies and Gentlemen. Welcome to Langchester Open Day. For the next four years you will be studying for your undergraduate degrees. It is a time that most people remember forever. We hope that by the end of today, you will have decided to spend that time here at Langchester University. Now, I know most of you probably have a detailed plan already, but just let me go over some of the main events and times of the day.

5D SPEAKING

2.21 Exercise 3, page 68

See **15** page 236

2.22 Exercises 4–5, page 68

See **16** page 237

5E LISTENING AND VOCABULARY

2.24 Exercises 3 and 6, page 69

R = Rosa MC = Mike Connolly

R: Today we're talking about the world of work: how it's changing and how it might change in the future. With me is economist Mike Connolly. Welcome to the show, Mike.

MC: Thanks, Rosa.

R: There's a lot of talk about the gig economy. What is it, exactly?

MC: Well, the term 'gig economy' dates from the financial crisis of 2009. It describes an economy in which it's difficult for people to find full-time jobs with permanent contracts. Many people, especially the young, have several part-time jobs or change frequently from one temporary job to another.

R: Many gig economy workers are self-employed, right?

MC: Yes, employers want flexibility so they employ a lot of freelance workers who hire out their time to different companies. Employers also prefer to pay their workers only when they need them. That's why many companies offer zero-hours contracts. These are contracts in which you agree to work for an employer but the employer doesn't guarantee you any work.

R: And of course, if you don't get any work, you don't get any money.

MC: Yes. Unpaid shifts are becoming more common, too. That's when you agree to work for a certain time, a day or a week, for no payment.

R: That sounds good for the employer but what's in it for the worker?

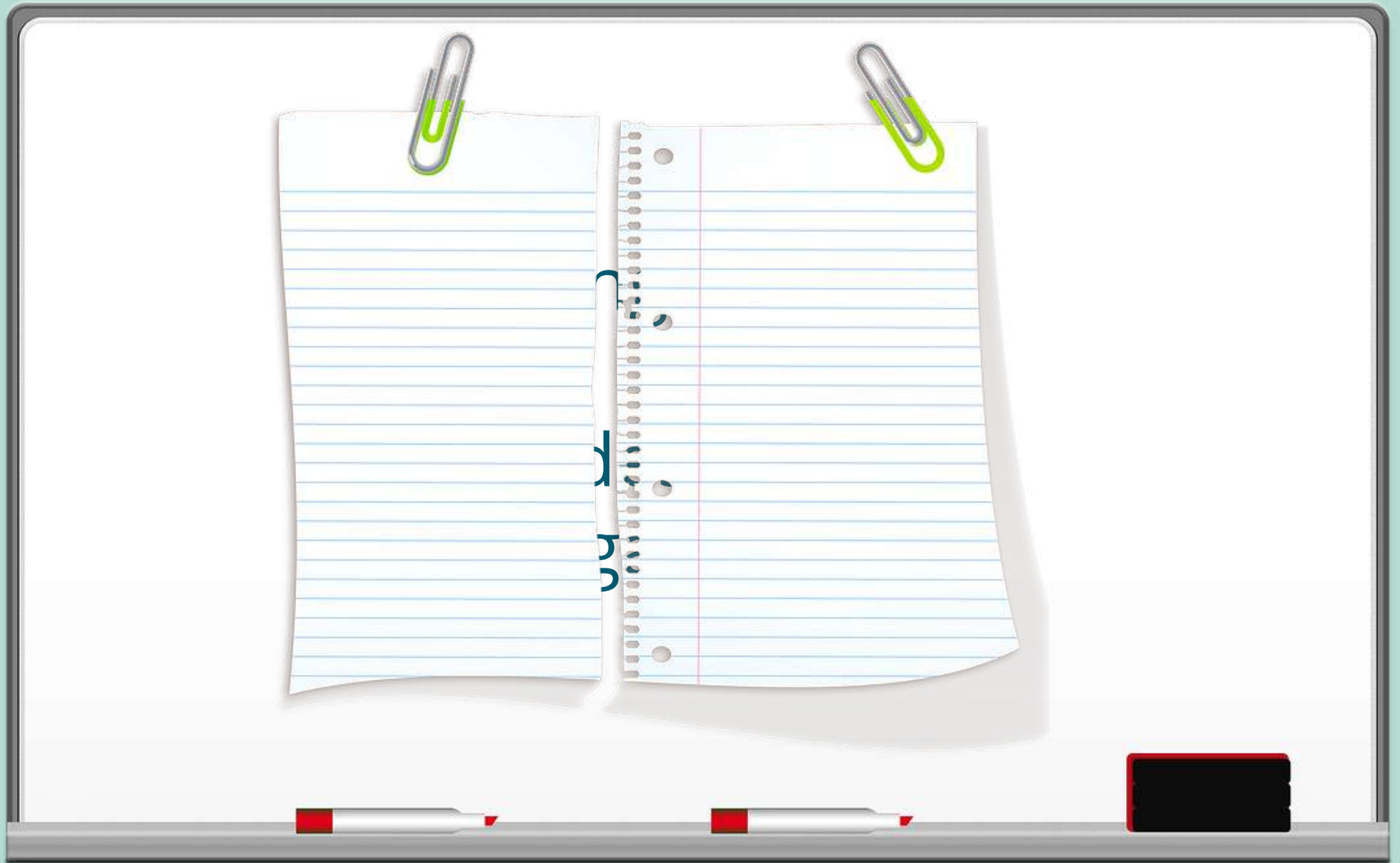
MC: Well, you have the opportunity to show that you're the right person for the job, which is good. And you might end up getting the job, which is better. But you could end up with no money and no job at the end of your shift, and that's not so good.

R: The gig economy isn't all negative, is it?

MC: Of course not. There are advantages. For a start, you get a lot of work experience in all sorts of jobs. And if you work freelance, it may not be necessary for you to commute, you may be able to work from home. Instead of a routine nine-to-five job, you are your own boss. You're free to decide when and where to work.

R: Like a musician playing gigs?

MC: Exactly. However, as most musicians will tell you, you don't turn down gigs because you never know when the next one will come along. So of course, there are also disadvantages to working in the gig economy. You may have to work long hours for low wages without getting paid overtime or holiday pay, even working around the clock when you have a deadline to meet. And at other times you may not have enough work or earn enough money. Even so, it's probably better than being unemployed.



Congrats!

You deserved
a game!

SURPRISE!

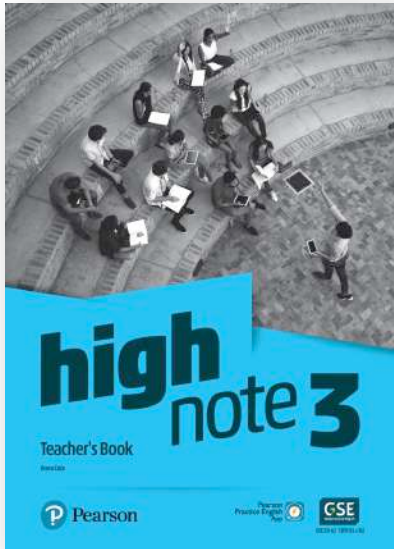
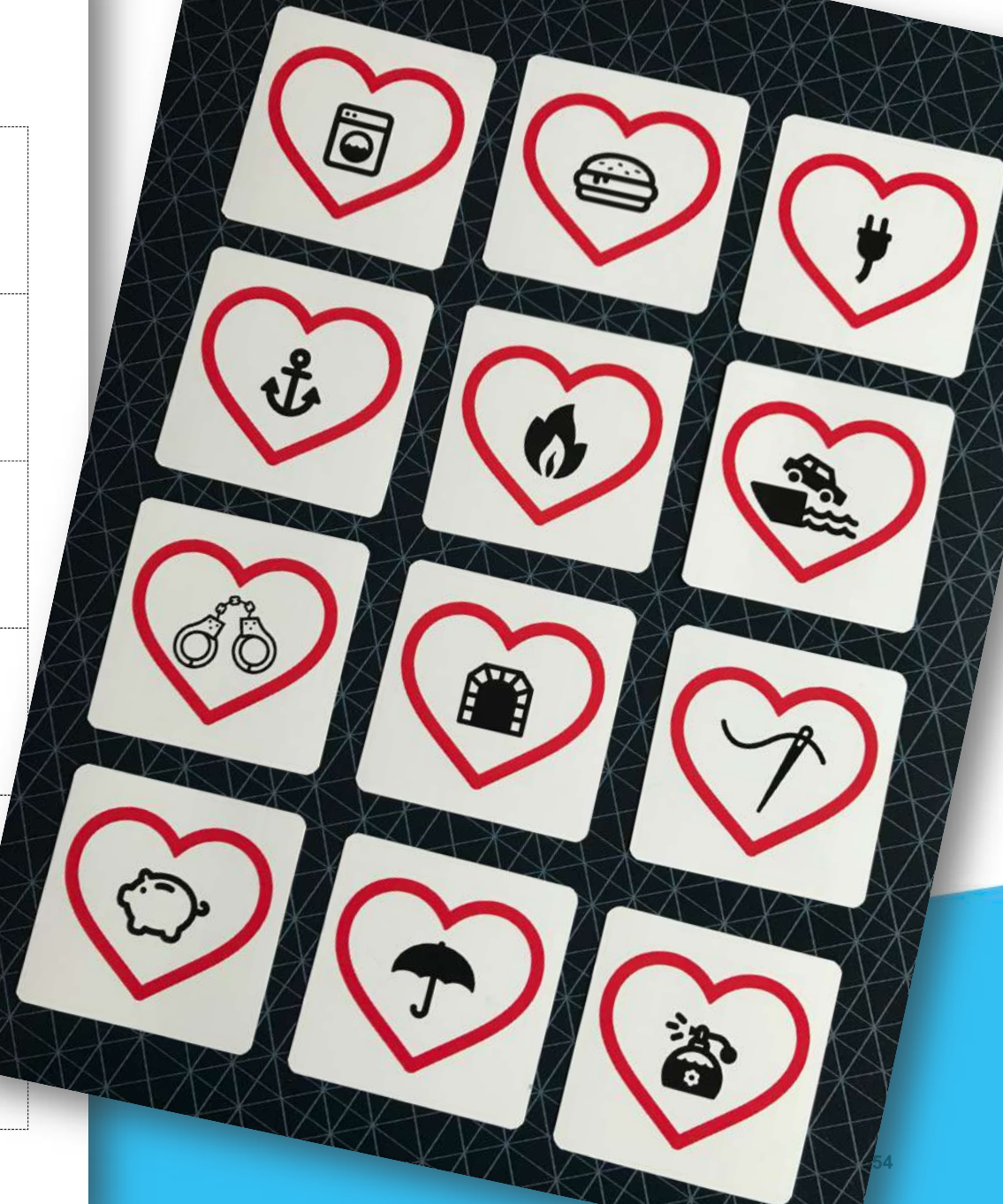
SURPRISE!

RESOURCE 16

Define and guess!

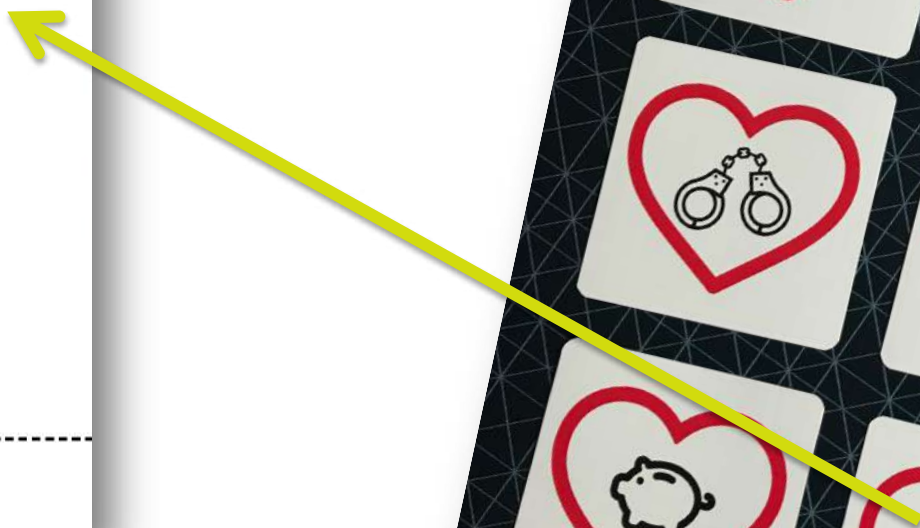
4C VOCABULARY (Travel essentials, travel phrases)

<p>suitcase</p> <ul style="list-style-type: none"> clothes pack travel 	<p>hotel</p> <ul style="list-style-type: none"> stay guest tourist 	<p>castle</p> <ul style="list-style-type: none"> building king medieval 	<p>first aid kit</p> <ul style="list-style-type: none"> box sick doctor 	<p>holiday</p> <ul style="list-style-type: none"> leisure travel break
<p>penknife</p> <ul style="list-style-type: none"> travel cut small 	<p>towel</p> <ul style="list-style-type: none"> swim gym beach 	<p>guide book</p> <ul style="list-style-type: none"> tourist visit read 	<p>sunblock</p> <ul style="list-style-type: none"> protect skin cream 	<p>passport</p> <ul style="list-style-type: none"> ID personal name
<p>power bank</p> <ul style="list-style-type: none"> battery portable charge 	<p>charger</p> <ul style="list-style-type: none"> mobile electricity plug 	<p>T-shirt</p> <ul style="list-style-type: none"> clothes casual jeans 	<p>plug in</p> <ul style="list-style-type: none"> electricity equipment connect 	<p>train</p> <ul style="list-style-type: none"> station transport track
<p>boat</p> <ul style="list-style-type: none"> water sail travel 	<p>travel adapter</p> <ul style="list-style-type: none"> plug electricity country 	<p>campsite</p> <ul style="list-style-type: none"> tent caravan stay 	<p>headphones</p> <ul style="list-style-type: none"> ear listen music 	<p>ear plugs</p> <ul style="list-style-type: none"> protect sleep swimming
<p>flight</p> <ul style="list-style-type: none"> plane pilot fly 	<p>beach</p> <ul style="list-style-type: none"> towel sea sand 	<p>insect repellent</p> <ul style="list-style-type: none"> mosquito lotion skin 	<p>backpack</p> <ul style="list-style-type: none"> bag travel hike 	<p>journey</p> <ul style="list-style-type: none"> trip travel transport
<p>torch</p> <ul style="list-style-type: none"> light camping electric 	<p>packing list</p> <ul style="list-style-type: none"> list pack tick off 	<p>travel pillow</p> <ul style="list-style-type: none"> rest neck sleep 	<p>route</p> <ul style="list-style-type: none"> way start destination 	<p>seatbelt</p> <ul style="list-style-type: none"> plane car protect



power bank

- battery
- portable
- charge



Unfolding mystery



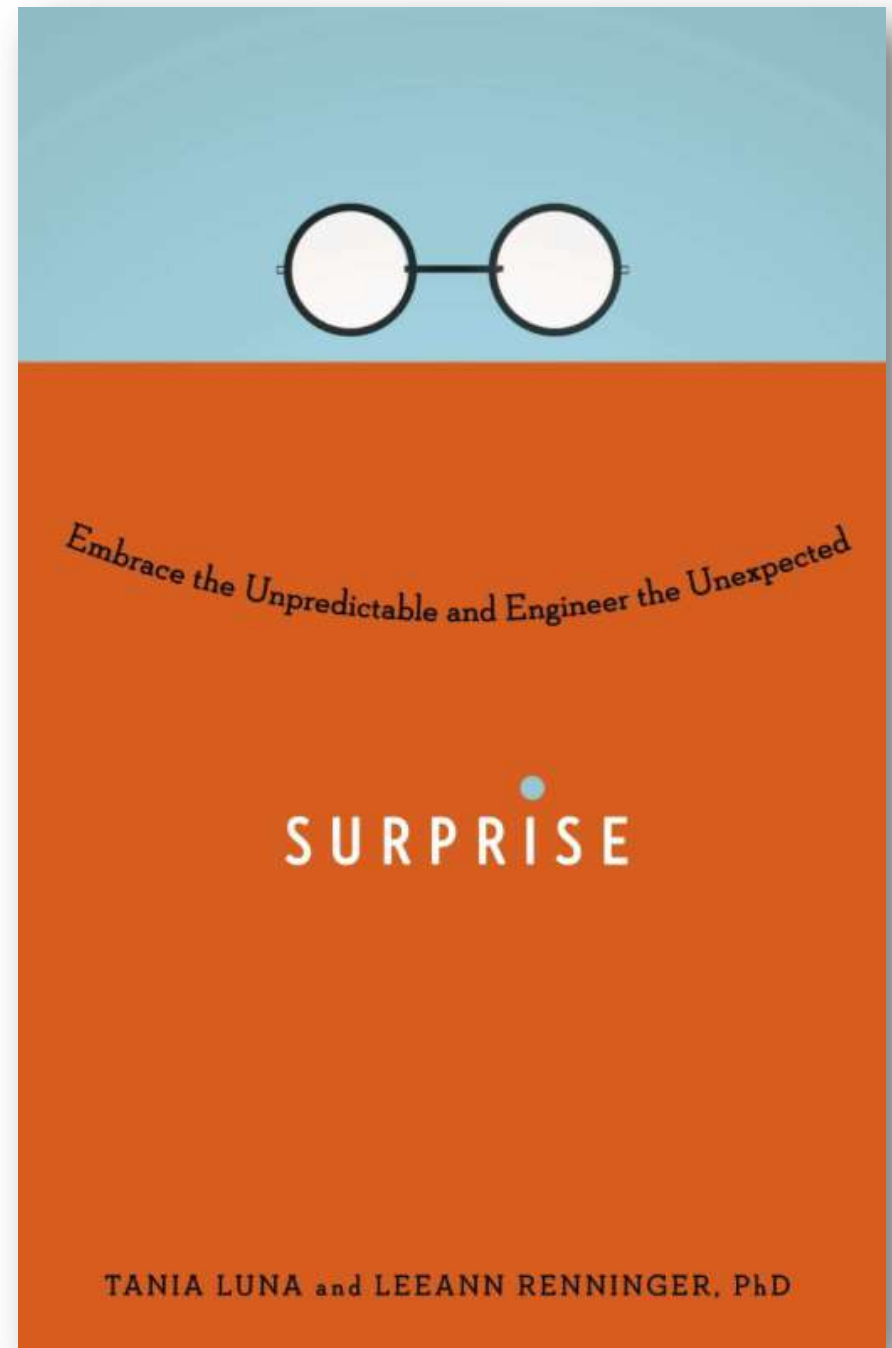
A TOP secret, individual goal:

- ask a lot of questions
- elaborate on what other Ss say
- paraphrase
- borrow pencils ;)

My Secret
Agent
today?

The end
is coming ;

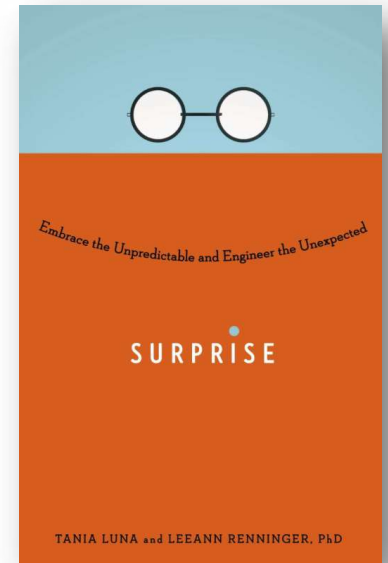
Surprise,
Tania Luna
LeeAnn Renninger



„A journey _____
_____ begins _____

_____“

„A journey to sustained attention begins with those few seconds in which you capture transient attention.“



The end

Yep, seriously

THANKS

for your attention 😊

Magda Kania

mkaniaw@gmail.com