

Kollegium St. Fidelis, Stans  
Mittelschule Nidwalden

Mai 2018

# Maturitätsprüfung 2018

## English

8.00 - 8.50	Part 1: <b>Listening (36 points)</b> 50 minutes
9.00 - 10.20	Part 2: <b>Comprehension (69 points)</b> 80 minutes
10.30 - 11.20	Part 3: <b>Language (69 points)</b> 50 minutes

At the end of each part all your worksheets will be collected.  
Write legibly and unambiguously.

*Good Luck!*

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Full Name: \_\_\_\_\_

Class: \_\_\_\_\_

# Listening - Key

## Part 1

1. Why is apple the most popular selling 30 centimeter pie? (2)

***When you buy a 30-centimeter pie, the whole family has to agree, and apple is everyone's second favorite.***

2. Why doesn't the 11 centimeter apple pie sell as well as the 30 centimeter pie? (2)

***[...] when you buy an individual 11-centimeter pie, you can buy the one that you want. You can get your first choice.***

3. What kind of global challenges can the effective use of data help with? Mention two of the examples given in the talk. (2)

***[...] the only way this planet is going to deal with its global challenges — to feed people, supply them with medical care, supply them with energy, electricity, and to make sure they're not burnt to a crisp because of global warming — is because of the effective use of data.***

4. Why can we say that 4'000 years ago data was stored more or less the same way as today? (2)

***We still store information on discs, [...]***

5. Data has gone from stationary and static to something fluid and dynamic. Explain. (2)

***Searching it is easier. Copying it easier. Sharing it is easier. Processing it is easier. And what we can do is we can reuse this information for uses that we never even imagined when we first collected the data. [...] it can be shared at the speed of light. More data.***

6. Explain the following quote: "Location has been datafied". (2)

***[...] in a telecommunications carrier's database, there is a spreadsheet or at least a database entry that records your information of where you've been at all times. If you have a cell phone, and that cell phone has GPS, but even if it doesn't have GPS, it can record your information.***

**Part 2**

*Fill the gaps with the word(s) from the text passage you will hear. You have one minute to read the text below before the audio starts. (12)*

Now think, for example, of the **issue of posture**, the way that you are all sitting right now, the way that you sit, the way that you sit, the way that you sit. It's all different, and it's a function of your **leg length** and your back and the contours of your back, and if I were to put sensors, maybe 100 sensors into all of your chairs right now, I could **create an index** that's fairly unique to you, sort of like a fingerprint, but it's not your finger.

So what could we do with this? Researchers in Tokyo are using it as a potential **anti-theft device** in cars. The idea is that the **carjacker** sits behind the wheel, tries to stream off, but the car recognizes that a non-approved driver is behind the wheel, and maybe the engine just stops, unless you type in a password into the **dashboard** to say, "Hey, I have **authorisation** to drive." Great.

What if every single car in Europe had this technology in it? What could we do then? Maybe, if we **aggregated** the data, maybe we could identify **tell-tale signs** that best predict that a car accident is going to take place in the next five seconds. And then what we will have datafied is **driver fatigue**, and the service would be when the car senses that the person slumps into that position, automatically knows, hey, set an internal alarm that would **vibrate** the steering wheel, honk inside to say, "Hey, wake up, pay more attention to the road." These are the sorts of things we can do when we **datafy** more aspects of our lives.

### Part 3

1. Arthur Samuel taught the computer the strategy of how to win at checkers. (2) False

*(So **he wrote a small sub-program alongside it operating in the background, and all it did was score the probability that a given board configuration would likely lead to a winning board versus a losing board after every move.**) [...] And then Arthur Samuel leaves the computer to play itself. It plays itself. **It collects more data.** It collects more data. **It increases the accuracy of its prediction.***

2. Cars can drive on their own, because they are programmed for the roads they travel on. (2) False

*We changed the nature of the problem from one in which we tried to overtly and explicitly explain to the computer how to drive to one in which we say, "**Here's a lot of data around the vehicle. You figure it out.**"*

3. Algorithms can help with the biopsy of breast cancer. (2) True

4. Privacy is the biggest problem today when we deal with big data. (2) False

***Privacy was the central challenge in a small data era.** In the big data age, the challenge will be safeguarding free will, moral choice, human volition, human agency.*

5. Because of big data and new technology, some highly educated people will lose their jobs. (2) True

6. When it comes to big data, technology is more important than information. (2) False

*We now need to recast our gaze at the I, the **information**, which is less apparent, but **in some ways a lot more important.***

# Comprehension and Vocabulary - Key

## A) Comprehension

Answer the following questions by formulating complete sentences. Avoid copying from the text and do not use contracted verb forms. (Contents: 22 points / Language: 12 points)

1. What do people often worry about in the context of Artificial Intelligence, and are these worries legitimate concerns according to Lee? (2/2)

- a) *People worry that developments in A.I. will bring about the “singularity” — that point in history when A.I. surpasses human intelligence, leading to an unimaginable revolution in human affairs. Or they wonder whether **instead of our controlling artificial intelligence, it will control us**, turning us, in effect, into cyborgs°.*
- b) *These are interesting issues to contemplate, but they are not pressing. **They concern situations that may not arise for hundreds of years, if ever.***

2. In Lee’s opinion, how will A.I. change the economy and the political world, and what are the consequences of this? (4/2)

- a) *[...] they will **reshape what work means and how wealth is created**,*
- b) ***leading to unprecedented economic inequalities and even altering the global balance of power.***

3. How is the A.I. revolution different from the Industrial Revolution and the computer revolution? (4/2)

- a) *Unlike the Industrial Revolution and the computer revolution, the **A.I. revolution is not taking certain jobs** (artisans, personal assistants who use paper and typewriters) and **replacing them with other jobs** (assembly-line workers, personal assistants conversant with computers). Instead, it is poised° to bring about **a wide-scale decimation of jobs** [...].*

4. According to Lee, what is A.I. bad at, and how is this a chance? (4/2)

- a) *Part of the answer will involve educating or retraining people in tasks A.I. tools aren’t good at. Artificial intelligence is **poorly suited for jobs involving creativity, planning and “cross-domain” thinking** — for example, the work of a trial lawyer.*
- b) *[...] “service jobs of love.” These are **jobs that A.I. cannot do, that society needs** and that give people a sense of purpose. Examples include accompanying an older person to visit a doctor, mentoring at an orphanage and serving as a sponsor at Alcoholics Anonymous — or, potentially soon, Virtual Reality Anonymous (for those addicted to their parallel lives in computer-generated simulations). **The volunteer service jobs of today, in other words, may turn into the real jobs of the future.***

5. How will “service jobs of love” and any other newly created jobs be funded? (4/2)

*It strikes me as unavoidable that large chunks of the **money created by A.I.** will have to be **transferred to those whose jobs have been displaced**. This seems feasible only through Keynesian° policies of increased government spending, presumably **raised through taxation on wealthy companies**.*

6. What difficulties do countries other than the USA and China face, and how are these countries to cope with them? (4/2)

- a) *[Other countries] face two insurmountable problems. First, **most of the money** being made from artificial intelligence **will go to the United States and China**. [...]*  
*The other challenge for many countries that are not China or the United States is that their **populations are increasing**, especially in the developing world. While a large, growing population can be an economic asset (as in China and India in recent decades), in the age of A.I. it will be an economic liability because it will comprise° mostly **displaced workers**, not productive ones.*
- b) *they will be forced to **negotiate** with whichever country supplies most of their A.I. software — China or the United States — **to essentially become that country's economic dependent, taking in welfare subsidies in exchange for letting the “parent” nation's A.I. companies continue to profit from the dependent country's users.***

*Answer the following question by carefully formulating **your own opinion** in an elaborated and well-structured text. Avoid copying from the text and do not use contracted verb forms.  
 (Contents: 10 points / Language: 6 points)*

7. Are you sceptical of A.I. or do you see it as a chance to improve our lives? (10/6)

**B) Vocabulary**

*Paraphrasing: explain the following passages by reformulating them, substituting the underlined words. (4)*

1. These are interesting issues to contemplate. (9)  
*fascinating/compelling/captivating/enthralling/attractive/appealing ...*  
*concerns/problems/subjects/topics/themes/matters/affairs/cases ...*  
*to think about/ponder/reflect on/muse about/brood over/reason/meditate ...*
2. Roughly speaking, it's technology that takes in huge amounts of information from a specific domain. (26-8)  
*more or less/generally/approximately*  
*captures/catches/gathers/collects*  
*data/knowledge/intelligence/material*  
*particular/determined/distinct/specified field*
3. A.I. is presenting us with an opportunity to rethink economic inequality on a global scale. (144-5)  
*occasion/chance/(possibility!) to reconsider/revise/review/think over/reassess*  
*worldwide dimension/internationally/universally*

*Synonyms: give one word or one expression with the same meaning. Do not explain the words. (4)*

to resemble (3)	<i>to look like, to take after, to remind of</i>	gains (52)	<i>profits, benefits</i>
multiple (15)	<i>numerous, countless, many</i>	unavoidable (85)	<i>inevitable</i>
to alter (23)	<i>to change</i>	to increase (126)	<i>to grow, to enlarge, to expand</i>
imperative (24)	<i>compulsory, obligatory, urgent</i>	option (132)	<i>choice, alternative</i>

*Antonyms: give one word or one expression with the opposite meaning. Do not explain the words. (4)*

artificial (1)	<i>natural; genuine, real</i>	gradually (36)	<i>abruptly, suddenly, immediately, at once</i>
to improve (18)	<i>to worsen, decline, deteriorate, degrade</i>	feasible (87)	<i>impossible, implausible; useless, pointless</i>
wealth (21)	<i>poverty</i>	conditional (91)	<i>unconditional, unlimited, unrestricted</i>
to eliminate (34)	<i>to add, create, introduce, implement, to establish</i>	to expand (121)	<i>to shrink, decrease, lessen, hinder, stop, close</i>

*Word families: use the word given in brackets to form a word that fits in the gap. (7)*

1. He is **reasonable** in his demands. *(reason, 14)*
2. We are competitors, not partners. *(to compete, 20)*
3. Because I have a limited amount of money, I am trying to **economise** and spend less on food than I usually do. *(economic, 22)*
4. The **decisive** year of the Reconstruction Period was 1876. *(decision, 29)*
5. In the Literature of Europe, there are many passages of great **imaginative** beauty. *(to imagine, 50)*
6. Fred looked for ways to make his business more **profitable**. *(profit, 51)*
7. Tom did not find anyone who met the **requirements**. *(to require, 63)*
8. He seems to find it difficult to integrate **socially**. *(society, 71)*
9. According to the court record, the serial killer showed no **compassion** for his victims. *(compassionate, 79)*
10. You cannot be too **choosy** if you want a job right away. *(choose, 81)*
11. The branches **move/are moving/moved/...** gently in the breeze. *(motion, 112)*
12. This element is **recognisable** throughout the play. *(recognition, 113)*
13. Teenagers should have the **autonomy** to make their own decisions in preparation for their lives as adults. *(autonomous, 117)*



# Language - Key

## A) Transformations

Reformulate the sentences using the word in brackets or starting it in the given way. Elements that do not change **need to be written**. (10)

1. I should have travelled more in my youth. (only)  
**If only I had travelled** more in my youth.
2. "Are you all coming tomorrow?" Terry asked us. (whether)  
Terry asked **us whether we were all coming the following / next day**.
3. We'll have to cancel the meeting if John does not turn up soon. (unless)  
**Unless John turns up soon**, we'll have to cancel the meeting.
4. I don't want you to come to my party! (rather)  
**I would rather you did not come** to party.
5. The manager provided the staff with extra training. (by)  
**The staff was provided with extra training** by the manager.
6. My best friend travelled around the world a lot when he was a child because his father was a diplomat. I'm sure he will never forget this. (remember / no "that")  
I'm sure my friend **will always remember travelling around the world** when he was a child.
7. Even though I did not have an umbrella, I walked home in the rain. (in spite)  
**In spite of not having an umbrella**, I walked home in the rain.
8. My laptop is gone so apparently someone has borrowed it. (must)  
**Someone must have borrowed** my laptop.
9. We need to have dinner at your place tonight because the workers are refurnishing my apartment at the moment.  
We need to have dinner at your place tonight because I'm **having my apartment refurnished at the moment**.
10. Do not count the words in your essay, it is a waste of time! (point)  
There **is no point (in) counting** the words in your essay.

## B) Conditionals

Complete the following sentences with the right verb form. (4)

1. Supposing the police **hadn't arrived** (not / arrive) in time to save the children that *were locked* in the basement, what **would have happened** (happen)? > **Type III**
2. If Alexander Fleming **hadn't discovered** (not, discover) penicillin, there **would have been** (would be) (be) far more casualties every year. > **Type III**
3. If the weather **is** (be) good tomorrow, we **will have** (have) a picnic in the park. > **Type I**
4. Famous people never stay in this hotel. But if a celebrity **stayed** (stay) here, we **would tighten** (tighten) our security arrangements. > **Type II**

**C) Tenses**

*Put the verbs in brackets into the correct tense and form, including passive, infinitive and gerund. (19)*

**Six years ago**, I (finish) **finished** high school. Since that day and **until last week**, I (not/see) **hadn't seen** any of my classmates again and I was kind of happy about that. I know it (sound) **sounds** weird but let me tell you why I think this way. **Back at school**, some of my mates (use/tell) **used to tell** me horrible things and I was fed up **with** (beg) **begging** them to leave me alone but they **neither** (pay) **paid** attention to my words **nor apologized for** (be) **being** so cruel to me. There was this girl who (call) **was called** Andrea, whom I especially disliked. We just (cannot/get) **couldn't get** along.

**Last week**, **as** I (walk) **was walking** along Milford street, I (hear) **heard** the most terrifying voice I (ever/hear) **had ever heard**. "Carla! Carla! It's me, Andrea!" My school nightmare was back. I (cannot/believe) **couldn't believe** what (happen) **was happening** to me. I asked the universe "What (I/do) **have I done** to deserve such punishment?!" As no answer (receive) **was received**, by my confused mind, I said to Andrea "Hi there!" How (you/be) **have you been** all this time? You (look) **look** fantastic."

**As** I (say) **was saying** this, I remembered a Spring Day celebration eight years before when I (call) **was called** Piggy by her and her girlfriends and I wished the earth **would swallow** (swallow) me up. "Well, you know, this and that," she replied. She went on "I (study) **was studying** at university **when** I (meet) **met** a wealthy man- which was what I (actually/look) **was actually looking / had actually been looking** for at university!- so I **dropped** (drop) out. I **got** (get) married and (buy) **bought** a three-storey house downtown. I (also/travel) **have also been travelling** a lot **recently**; in fact, I (travel) **have travelled** the globe three times **already**. What else...?" "Oh, you have a wonderful life! Congrats!" I said reluctantly. "What about you?" she asked. "What (you/do) **have you been doing** **recently**?" she added. (not/have) **Not having** time to think of a better answer, I replied with the truth. "I (work) **have worked** in a small grocery **for five years** but I (try) **have been trying** to find a better job **for quite some time now**. I (also/learn) **am also learning / have also been learning** how to speak Spanish, as **I hope one day** I (be) **will be** able to visit my parents' family in Spain." She said she was in a hurry, kissed me goodbye and left. No comment (make) **was made** about my news. As I started (walk) **to walk/walking** towards the bus stop, I could hear a silly laughter coming from her. "Poor thing!" I thought "She (not/change) **hasn't changed** in the least; she is **still the same** shallow Andy... still the same..."

**D) Phrasals**

*Complete the following sentences by replacing the verbs in **bold print** with a phrasal verb from the box in the appropriate form (do not change the tense). Not all the phrasal verbs in the box are used. (10)*

1. Stop boasting / **showing off** and do your job!
2. I had been on a diet for two months but yesterday I just could not resist any longer / **gave in** and had a cream cake.
3. The numbness in his shoulder was starting to gradually disappear / **wear off**
4. She really looks like / **takes after** her mother; the resemblance is incredible!
5. Since the company was on the verge of bankruptcy, 500 workers had to be fired / **laid off**.
6. I'm afraid we'll have to postpone / **put off** the meeting as our CEO's flight has been cancelled / **called off**
7. He was surprised to learn that he inherited / **came into** a lot of money after his grandmother died / **passed away** in her sleep right before Christmas.
8. Gas officials are investigating / **looking into** the cause of the explosion.

**E) Open Cloze**

Complete the text, using one suitable word in each gap. (15)

It's 500 years **since** Martin Luther defied the authority **of** the Catholic church. It's time **for** a similar revolt **against** the hypocrisy of the religion of technology.

A new power is loose **in** the world. It is nowhere and **yet** it's everywhere. It knows everything about us – our movements, our thoughts, our desires, our fears, our secrets, who our friends are, our financial status, even **how** well we sleep **at** night. We tell it things that we would not whisper to another human being. It shapes our politics, stokes our appetites, loosens our tongues, heightens our moral panics, keeps us entertained (and therefore passive). We engage **with** it 150 times or more every day, and with every moment of contact we add **to** the unfathomable wealth of its priesthood. And we worship it **because** / **since** / **as** / **for** we are, somehow, mesmerised by it.

In **other** / **different** words, we are all members of the Church of Technopoly, and **what** we worship is digital technology. Most of us are so happy in our obeisance to this new power that we spend **an** average of 50 minutes on our daily devotion **to** Facebook alone **without** a flicker of concern. It makes us feel modern, connected, empowered, sophisticated and informed.

Suppose, **though/however**, you were one of a minority who was becoming assailed by doubt – stumbling **towards** the conclusion that what you **once** thought of as liberating might actually be malign and dangerous. But yet everywhere you look you see only happy-clappy believers. How would you go **about** convincing the world that it was in the grip of a power that was deeply hypocritical and corrupt? Especially when that power apparently offers salvation and self-realisation for those **who** worship at its sites?

It would be a tough assignment. But take heart: there once was a man who had similar doubts **about** / **on** the dominant power of his time. His name was Martin Luther and 500 years ago **on** Tuesday he pinned a long screed on to the church door in Wittenberg, which was then a small and relatively obscure town in Saxony. The screed contained a list of 95 “theses” challenging the theology (and therefore the authority) of the then all-powerful Catholic church. This rebellious stunt **by** an obscure monk must have seemed **at** the time like a flea bite on an elephant. But it was the event that triggered a revolution **in** religious belief, undermined the authority of the Roman church, unleashed ferocious wars in Europe and shaped the world in which most of us (at least **in** the west) grew up. Some flea bite.

In posting his theses Luther was conforming **to** an established tradition of scholastic discourse. A “thesis”, in this sense, is a succinctly expressed proposition put **forward** as the starting point for a discussion. What made Luther's theses really provocative, though, was that they represented a refutation of **both** the theology and the business model of the Catholic church. In **those** days, challenging **either** would not have been a good career move for an Augustinian monk. Challenging both was suicidal.

**F) Translation**

*Translate the following sentences as precisely as possible. (10)*

1. Nachdem sie ihren High School Abschluss gemacht haben, setzen viele Studenten ein Jahr aus, um Militärdienst zu leisten oder Berufserfahrung zu sammeln.

*After graduating from high school, many students take a gap year before going/they go to university (in order/so as) to do military service or gain work experience.*

2. Die Globalisierung hat zu einem Anstieg der Zu- und Abwanderung beigetragen, da sie die Ungleichheit zwischen den Nationen hervorgehoben hat.

*Globalisation has contributed to an increase in immigration and emigration, for/since/as/because it has highlighted/stressed/emphasised the inequalities among (~~between~~) nations.*

3. Falls du einer Firma eine Blindbewerbung schickst, vergewissere dich, dass dein Lebenslauf und dein Bewerbungsschreiben einen guten Eindruck machen.

*If you send a blind application to a company, make sure your CV and your letter of application make a good impression.*

4. Viele Wissenschaftler sind beunruhigt, dass die Gletscher schmelzen, der Meeresspiegel ansteigt und tausende von Tier- und Pflanzenarten vom Aussterben bedroht sind.

*Many scientists are worried that glaciers are melting, the sea level is rising and thousands of species are at risk of extinction.*

5. Der zunehmende Druck zu gewinnen und bestehende Rekorde zu brechen hat dazu geführt, dass immer mehr Sportler leistungssteigernde Drogen nehmen.

*The increasing pressure to win and beat/break existing records has caused/led to more and more sportsmen and sportswomen to take performance-enhancing drugs.*