



Technical Report in English

Technischer Vortrag auf Deutsch

Misconceptions and Hints

Missverständnis und Hinweise

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Technical Report in a Foreign Language

Technischer Vortrag auf einer Fremdsprache



Technical Part

One should know exactly
how something works

Technisches Teil

Einer muss genau wissen,
wie etwas funktioniert

Foreign Language

One should know exactly
how to explain it

Fremdsprache

Einer muss wissen,
wie man das erklärt



First PhD English Exam

Erste PhD Deutschprüfung

1. Чтение и письменный перевод на русский язык со словарем отрывка из оригинальной или учебной литературы по специальности (время – до 45 минут; объем отрывка – 600–800 печатных знаков).
2. Ознакомительное чтение отрывка из оригинальной или учебной литературы по специальности (время – до 5 минут; объем отрывка – 1500 печатных знаков) и передача основного содержания отрывка на русском языке.
3. Беседа на иностранном языке без подготовки на одну из перечисленных ниже тем: для сдающих английский язык
 - Я и моя семья • Мой город • Мой институт (университет) • Москва • Лондон • Вашингтон
 - для сдающих немецкий язык
 - Я и моя семья • Мой город • Мой институт (университет) • Москва • Свободное время. Интересы • Страны изучаемого языка • План научной работы • Моя учеба в высшем учебном заведении. Моя специальность.



Misconceptions and Hints

Missverständnis und Hinweise

1. This is going to be easy
1. Es wird einfach sein
2. One fears one is not going to make it
2. Angst zu haben, dass einer es nicht schafft
3. There are no exceptions
3. Es gibt keine Ausnahmen
4. This presentation covers everything
4. Diese Präsentation deckt alles ab



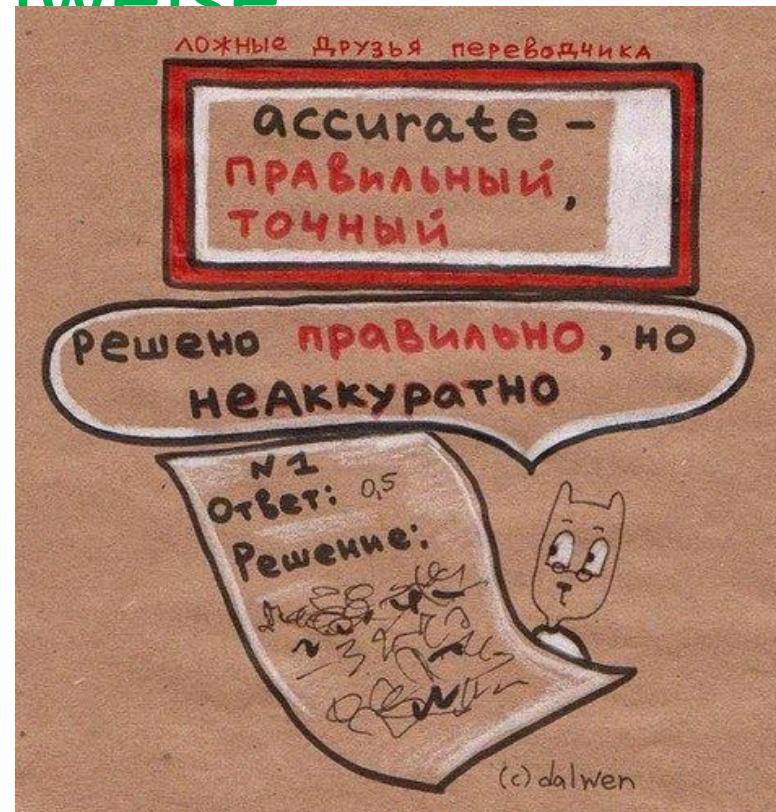
Misconceptions and Hints

Missverständnis und

5. Literal Translation

5. Wörtliche Übersetzung

Hinweise





Misconceptions and Hints

Missverständnis und

- 6. Word Order
- 6.
Wortordnung





Misconceptions and Hints

Missverständnis und

Hinweise

My name is Alex

This is a good example!

Mein Name ist Alex

Das ist ein gutes

Beispiel!

If you think that there is no such foreigner
who learns Russian and says 'Мое имя
есть Джон', you are wrong 😊

Wenn ihr denkt, dass es keinen solchen
Ausländer gibt, der 'Мое имя есть Джон'
sagt, habt ihr Unrecht 😊



Misconceptions and Hints

Missverständnis und

8. A tiger saw THE tiger **Hinweise**
8. EIN Tiger sah DEN Tiger

a	an	the	no article
indefinite article with consonants (b,c,d,f,g...z)	indefinite article with vowels (a,e,i,o,u)	definite article <u>regardless</u> whether the noun starts with a consonant or a vowel	-
<u>not</u> specifically known to the person you are speaking with singular nouns	<u>not</u> specifically known to the person you are speaking with singular nouns	specific object that <u>both</u> the speaker and the listener <u>know</u> plural nouns	general things uncountable nouns
-	-	collection of states in a country (The United States of America, The UK, The Irish Republic)	countries, states, counties, provinces, lakes, mountains
-	-	Multiple areas: The Philippines, The Netherlands, the British Isles	others: sports, meals, places, transport, rivers, oceans, seas
-	-	Geographical points in the globe (the North Pole, the equator)	-
-	-	one and only particular thing (the sun, the moon, the wind, the Buckingham Palace)	-



Misconceptions and Hints

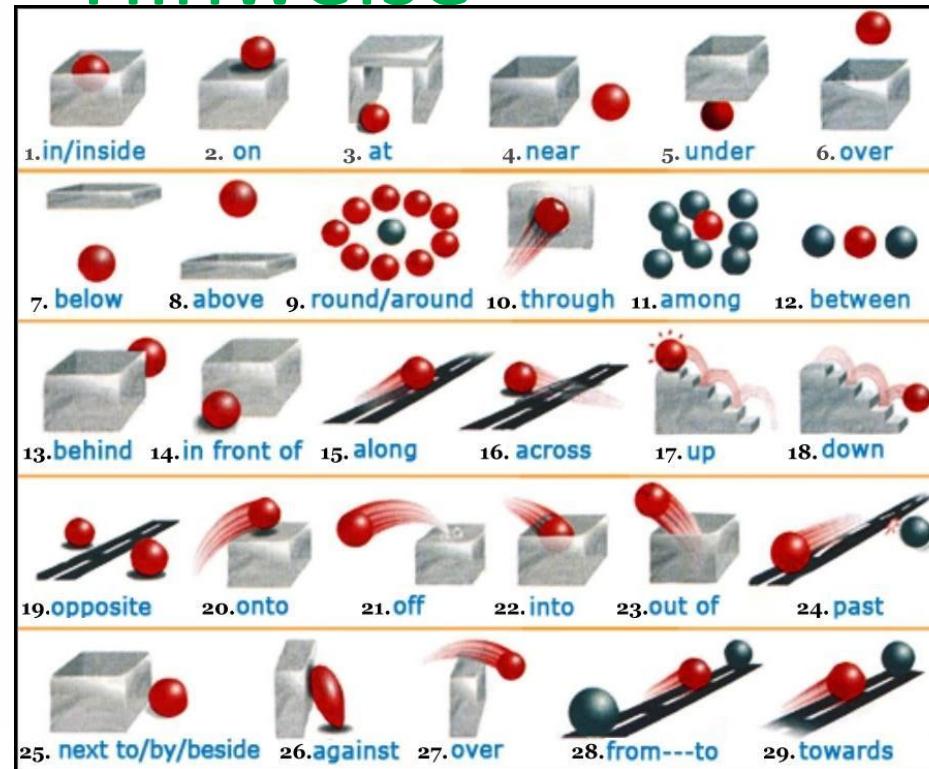
Missverständnis und

Hinweise

9. Prepositions

9.

Präpositionen





Common Mistakes

1. Words
1. Wörter

Verbreitete Fehler

accurate ≠ precise

accurate ≠ careful





Common Mistakes

Verbreitete Fehler

2. Prepositions and Articles

2. Präpositionen und Artikeln

5 COMMON MISTAKES

1 Incorrect: Thi

Correct: Thi

2 Incorrect: Wh

Loc

Correct: Wh
Loo

3 Incorrect: Let'

Correct: Let's l

4 Incorrect: I me

Correct: I me

5 Incorrect: She insisted to pay

Correct: She insisted on paying.

*We came here on a car = We came here **on the roof** of our car*

*We came here by car = Car was the **means of traveling***

*He came here on time = He came **at** 9.45*

*He came here in time = He came **exactly at** 10*

I am a student = Like any other in our university

I am the student = ... you were talking about

To connect wires = A general skill to connect wires

To connect the wires = To connect these wires





My Family

Meine

Familie

a father, a husband

ein Vater, ein Ehemann

a mother, a wife

eine Mutter, eine

Ehefrau

ein Kind

children, siblings

die Kinder,

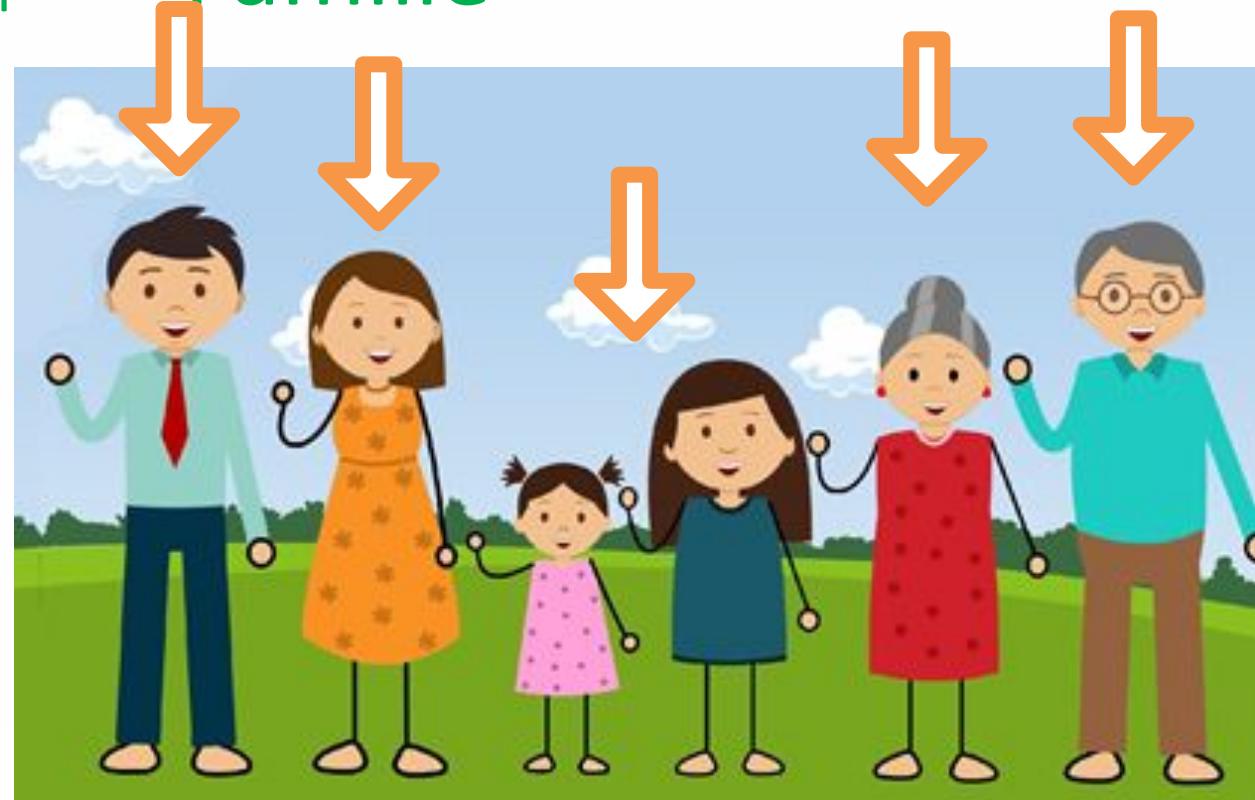
die Großmutter

eine

Großmutter

grandfather

ein





My Hometown

Meine Heimatstadt



a country
ein Land

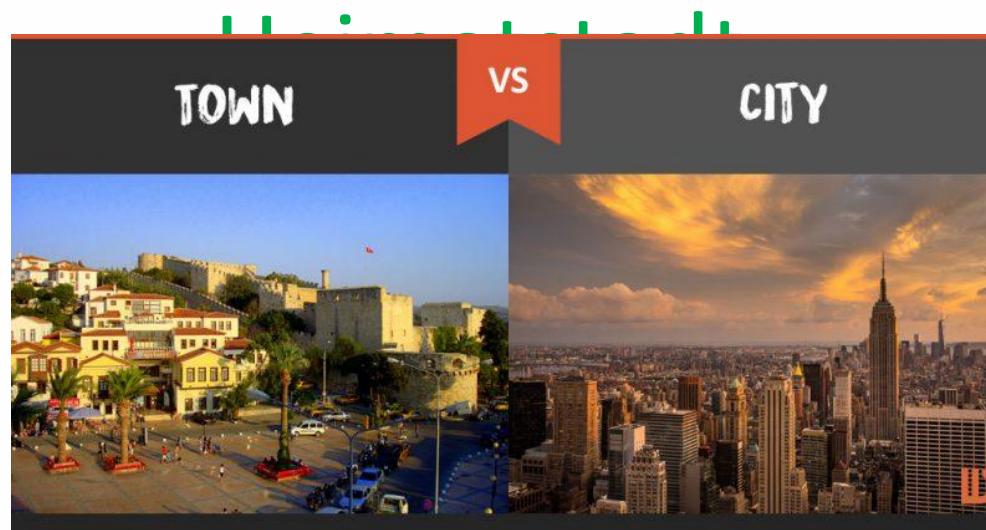
a town
eine Stadt

My hometown is Orel, it is situated in the European part of Russia
Meine Heimatstadt ist Orel, sie befindet sich in der europäischen Teil von Russland



My Hometown

Meine



Orel ???
Oryol

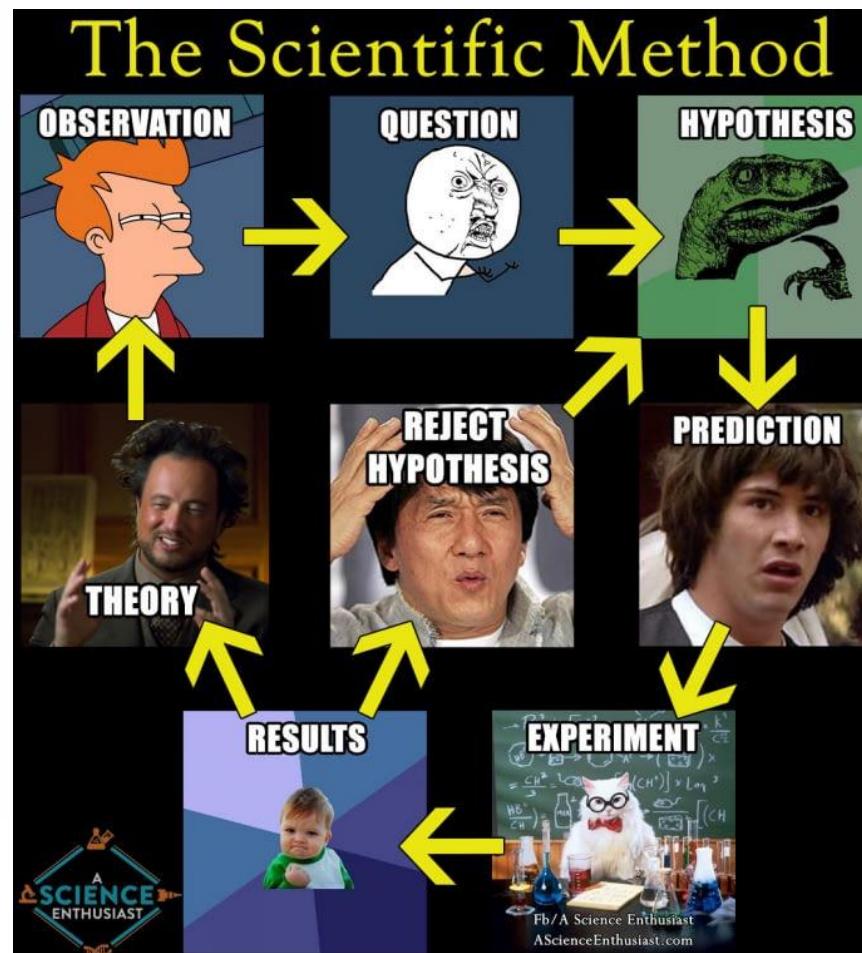


Munich =
München



My Scientific Work

Meine Wissenschaftliche





My Scientific Work

Meine Wissenschaftliche Arbeit

an electromotor

ein elektromotor

a coupling

eine Kupplung

a bearing

ein Lager

a shaft

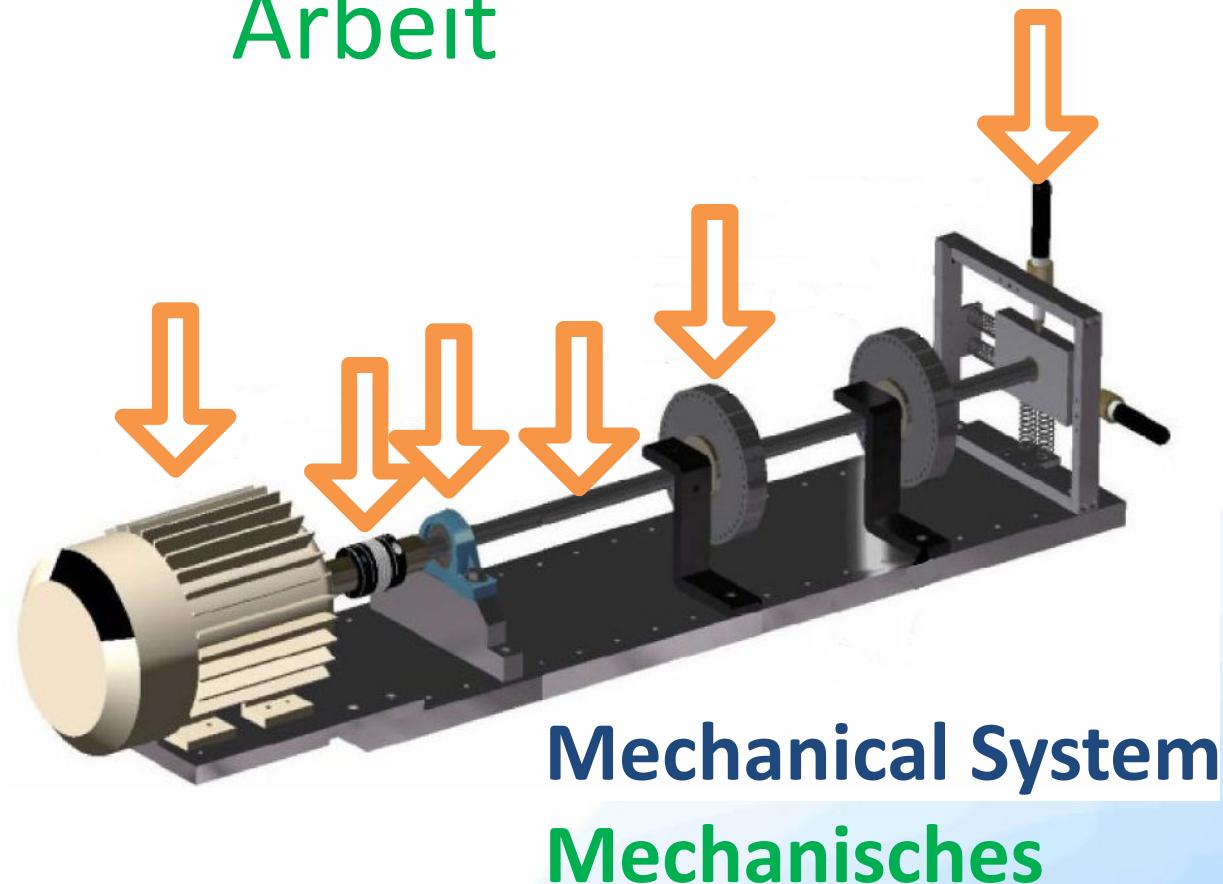
eine

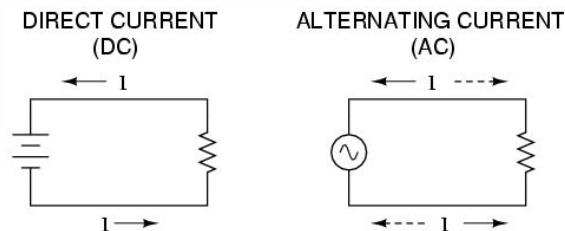
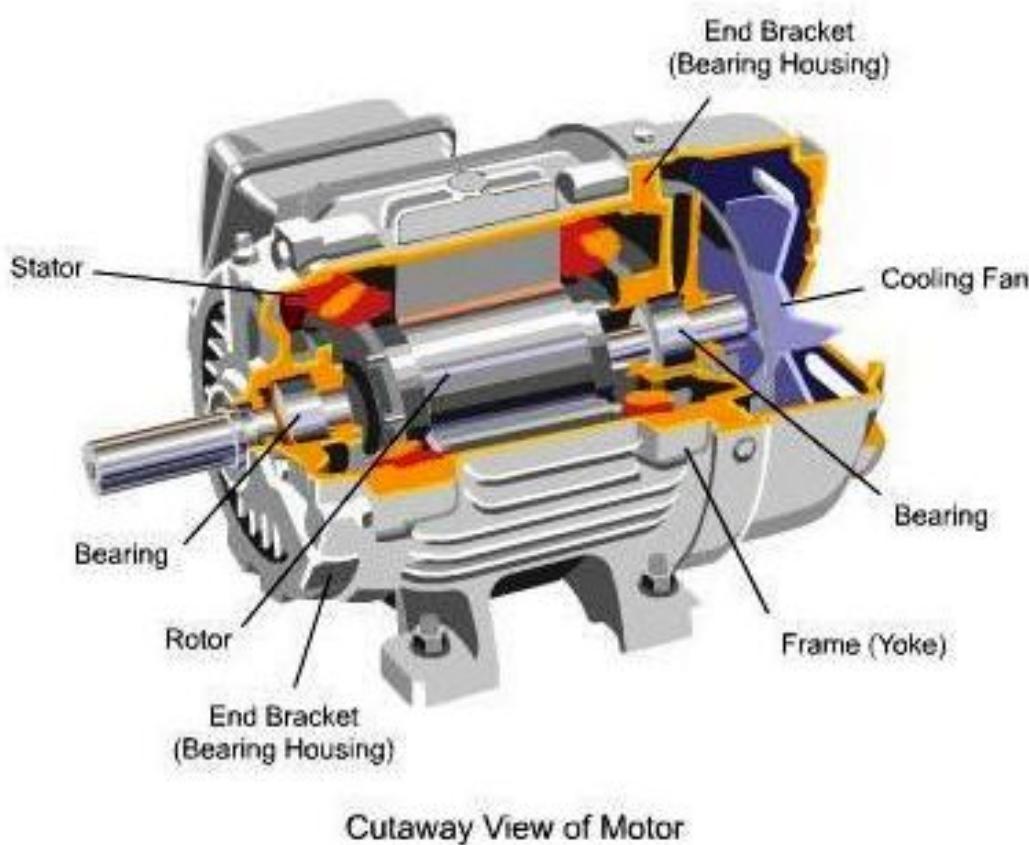
Rotorwelle

eine Ladung

a sensor

ein Sensor





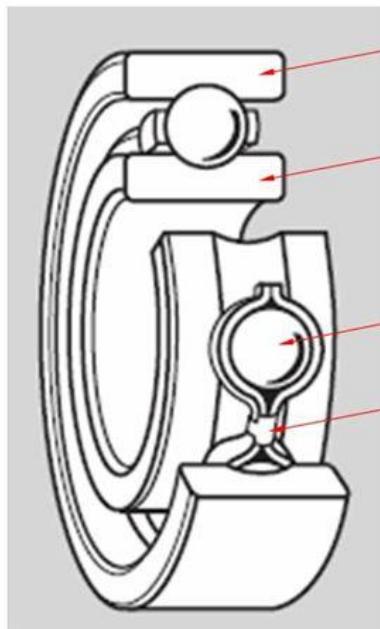
According to the International System of Units (SI), **rpm** is not a unit. This is because the word *revolution* is a semantic annotation rather than a unit. The annotation is instead done as a subscript of the formula sign if needed. Because of the measured physical quantity, the formula sign has to be f for (rotational) frequency and ω or Ω for angular velocity.

The corresponding basic SI derived unit is s^{-1} or **Hz**. When measuring angular speed, the unit **radians per second** is used.

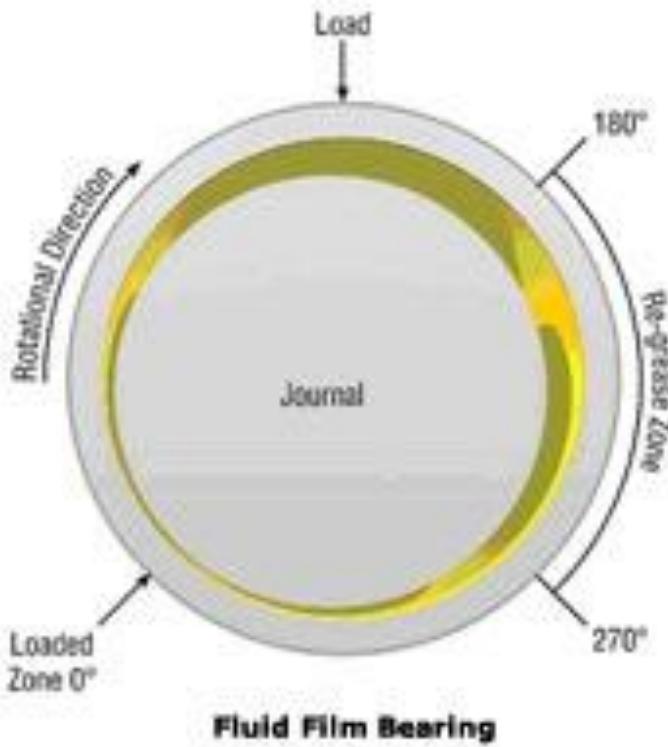
$$1 \text{ rad/s} \leftrightarrow \frac{1}{2\pi} \text{ Hz}$$
$$\leftrightarrow \frac{60}{2\pi} \text{ rpm}$$

$$1 \text{ rpm} \leftrightarrow \frac{1}{60} \text{ Hz}$$
$$\leftrightarrow \frac{2\pi}{60} \text{ rad/s}$$

$$1 \text{ Hz} \leftrightarrow 2\pi \text{ rad/s}$$
$$\leftrightarrow 60 \text{ rpm}$$



Elements of a Rolling Element Bearing



Fluid Film Bearing



Sensor

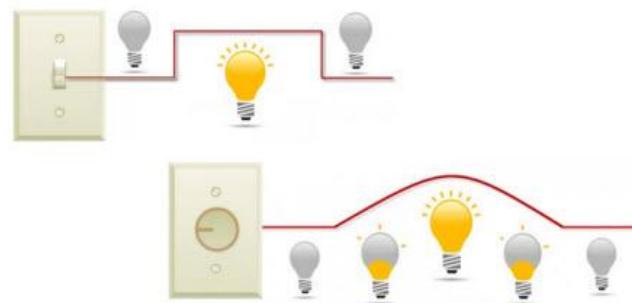


the ones that
**detect a
stimulus**



the ones that
**detect a value
of a stimulus**

Understanding Discrete & Analog I/O





Anatomy of a Scientific Paper

Are All Apples Red?

by
Ida Cortland

Abstract:

We examined several apples' color. Although most are red, some are not.

Introduction:

An age-old question is: are all apples red? MacIntosh (1993) thought so. G. Smith (1999) begs to differ. We hope to resolve this issue once and for all.

Methods:

We went to the local grocery store and bought one of every apple they had. We took them home and looked at them.

Results:

We found four red apples, one green apple, and two yellow apples.

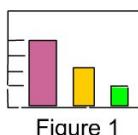


Figure 1

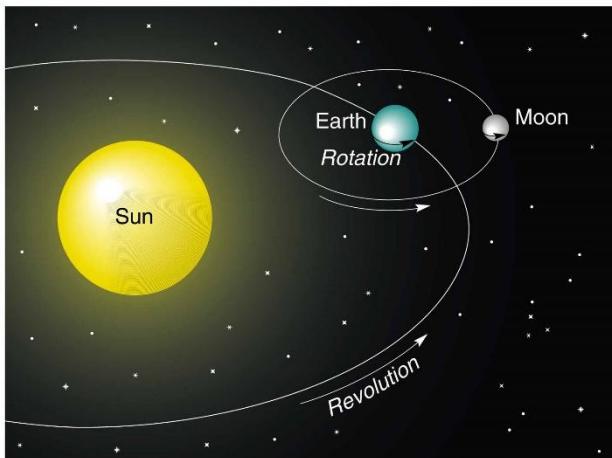
Discussion:

Since we found one yellow apple and two green apples, it must be true that all apples are not red. We concur with G. Smith's findings.

References:

- MacIntosh (1993) *Journal of Fruit Science*. 4(3): 121-135.
Smith, G. (1999) *Apple Technology Today*. 7(3):4-8.

Pomes and You, Volume 3, Issue 4 (2003) p. 8



Equation vs. Function Notation

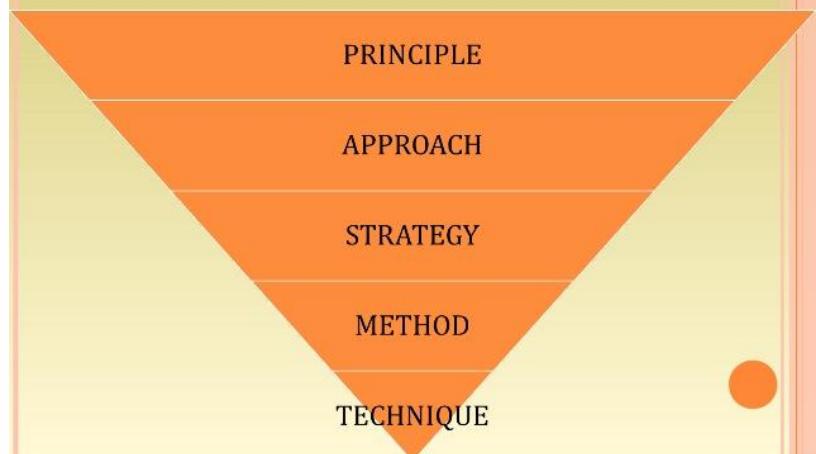
* equation has variables x and y

Example: $y = 4x - 3$

* the "y" in the equation is commonly replaced with $f(x)$ or $g(x)$

Example: $f(x) = 4x - 3$
 $f(x)$ is read as "f of x"
 $f(x)$ represents the range values.
So $f(2)$ means to find the value of the function when x is 2. The expression inside the parentheses represents x .

DIFFERENCE AMONG THE TERMS TECHNIQUE, METHOD, STRATEGY, APPROACH AND PRINCIPLES





Thank you!
Danke!

Questions,
please!

Fragen, bitte!