





FOR SCHOOLCHILDREN,
THEIR SIBLINGS, PARENTS, FRIENDS,
NEIGHBOURS AND TEACHERS



ANY IDEA HOW MANY PUPILS THERE
ARE IN THE SCHOOLS IN UKRAINE
NOWADAYS?



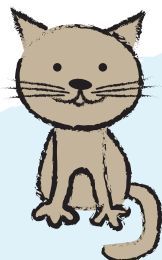
HOW MANY PERSONS TRAVEL
BY BUS IN UKRAINE DAILY?



HOW MUCH CHOCOLATE IS PRODUCED
IN UKRAINE IN A YEAR?

LET'S ASK
STATISTICS!

YOU WILL FIND
THE ANSWERS
ON PAGE 27



WHAT IS STATISTICS?

ONE AND ZERO WILL HELP US TO FIND OUT



WHAT IS STATISTICS ABOUT?



WHO USES STATISTICS?

- 
- PEOPLE
 - BUSINESSES
 - SCHOOLS, UNIVERSITIES, COLLEGES
 - RESEARCH INSTITUTES
 - NEWSPAPERS, JOURNALS, TV
 - INTERNET MEDIA
 - GOVERNMENT
 - INTERNATIONAL ORGANISATIONS

WHY DO WE NEED STATISTICAL INFORMATION?



LET'S MAKE STATISTICS TOGETHER





WE CAN WALK TO
THE SUPERMARKET AND BUY
EVERYTHING, JUST GUESSING

BUT THEN WE RISK THAT THERE ARE
NOT ENOUGH CHOCOLATES AND CAKES,
AND TOO MANY ICE CREAMS


AND IT IS EXACTLY
HERE THAT STATISTICS
CAN HELP US!

STATISTICAL SURVEY



TO KNOW HOW MANY CHOCOLATES,
CAKES AND ICE CREAMS WERE EATEN
LAST YEAR, YOU MIGHT HAVE COUNTED
ALL THE WRAPPERS LEFT FROM
THE LAST BIRTHDAY PARTY!

STATISTICIANS CALL IT
"DATA COLLECTION"



IF YOU CAN'T FIND THE WRAPPERS FROM
THE LAST YEAR, YOU CAN ASK YOUR
CLASSMATES HOW MANY CHOCOLATES,
CAKES AND ICE CREAM THEY USUALLY
EAT AT A PARTY!

YOU CAN JUST ASK THEM
OR PREPARE A "QUESTIONNAIRE"

LET'S TRY IT!

START

4

HOW TO CARRY
OUT A SURVEY?

1

WHAT DO I NEED
TO KNOW?

3

HOW TO ASK?

2

HOW CAN
I FIND OUT?

FINISH

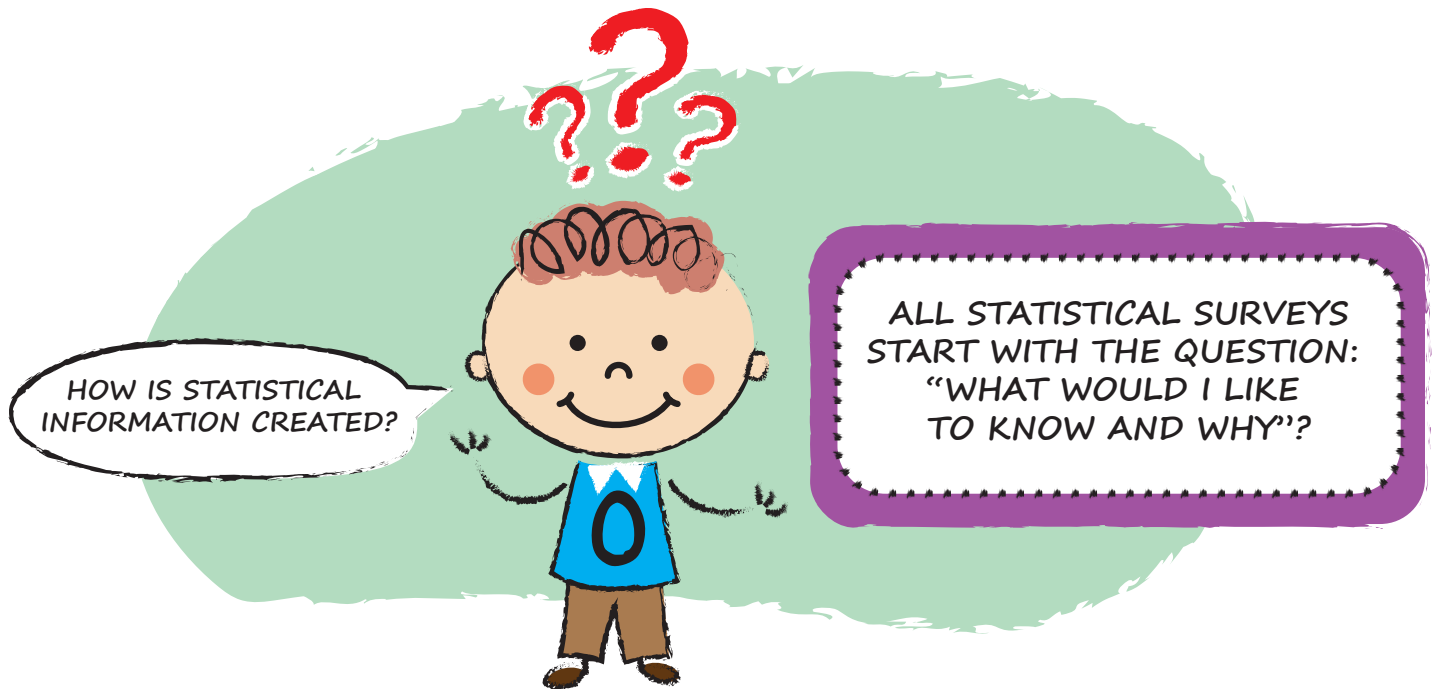
5
HOW TO
PROCESS THE
COLLECTED DATA?

8
HOW TO MAKE USE
OF STATISTICAL
INFORMATION?

6
NOW I HAVE
REAL STATISTICAL
INFORMATION!

7
HOW TO MAKE THE
INFORMATION MORE
UNDERSTANDABLE

1 WHAT DO I NEED TO KNOW?



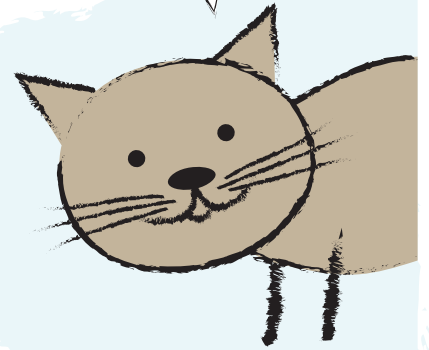
WE HAVE DECIDED THAT WE WOULD LIKE TO KNOW WHAT KIND OF SWEETS THE KIDS IN OUR CLASS PREFER. ON MONDAY MORNING THERE WAS A NEW TEXT ON THE BOARD IN THE CLASS ROOM:



1 WHAT DO I NEED TO KNOW?



WHY DO WE GUESS AND ARGUE?
WE COULD DO A LITTLE
STATISTICAL SURVEY



I THINK CHOCOLATES
ARE THE BEST



WITHOUT DOUBT,
APPLES ARE MOST
HEALTHY



I LOVE ICE CREAM



WHAT'S A PARTY
WITHOUT PASTRIES
AND A CAKE?

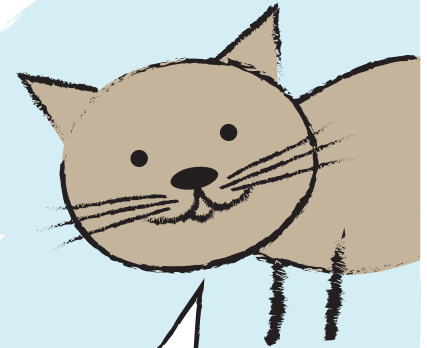


2 HOW CAN I FIND OUT?

WE COULD UNDERTAKE SOME INTERVIEWS DURING THE BREAK?



OR HAND OUT SOME FORMS AND ASK THE KIDS TO FILL THEM IN



SUCH A SURVEY COULD ALSO BE DONE ON THE PHONE OR THE WEB

NOW WE NEED TO DECIDE HOW WE SHOULD GET THIS INFORMATION



YOU CAN PREPARE THE QUESTIONNAIRE AND ASK THE KIDS TO RESPOND TO THE QUESTIONS. PARTICIPANTS OF SUCH A SURVEY WILL BE CALLED RESPONDENTS



3 HOW TO ASK?

THE QUESTIONNAIRE IS NOT
A TEST, YOU DON'T NEED
TO WRITE YOUR NAME ON IT

IT WILL BE CALLED
"ANONYMOUS"


THE ANSWERS WILL DEPEND
ON THE APPETITE
AND PREFERENCES

THE QUESTIONNAIRE CAN HAVE
OPEN AND CLOSED QUESTIONS

CLOSED QUESTIONS
RESPONDENTS CHOOSE ONE OF
A SELECTION OF ANSWERS

OPEN QUESTIONS
RESPONDENTS WRITE THEIR
OWN ANSWER

4 HOW TO CARRY OUT THE SURVEY?



TO PREPARE
A GOOD
QUESTIONNAIRE
IS AN ART!

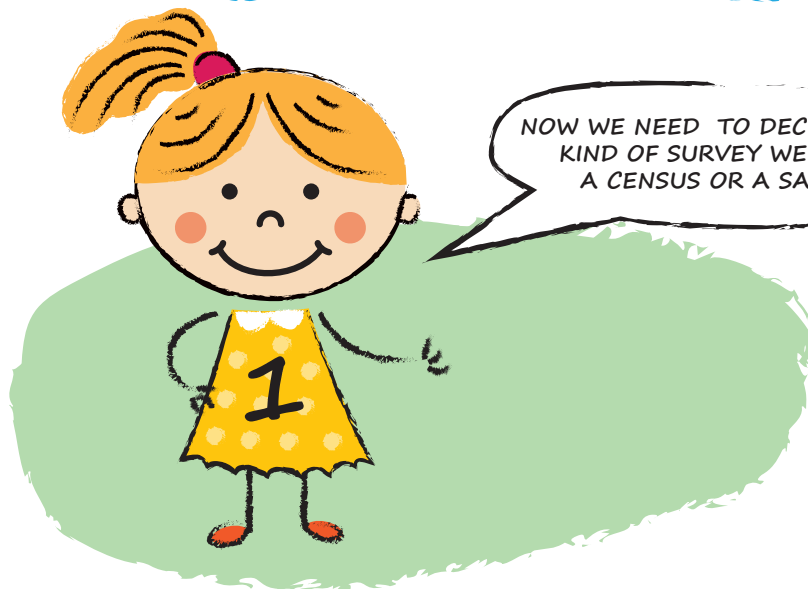
HERE YOU CAN
FIND SOME ADVICE

EXPLAIN BRIEFLY, HOW TO COMPLETE
THE QUESTIONNAIRE

KEEP YOUR REPLY
ALTERNATIVES CLEAR

COMPOSE ONLY QUESTIONS WHICH YOUR
RESPONDENTS WILL UNDERSTAND

4 HOW TO CARRY OUT THE SURVEY?



NOW WE NEED TO DECIDE WHAT
KIND OF SURVEY WE NEED:
A CENSUS OR A SAMPLE



IF WE TAKE ALL KIDS IN THE CLASS
IT WILL BE A CENSUS

CENSUS - EVERYBODY WILL BE ASKED
(ALL PUPILS, ALL FACTORIES ETC.)



SAMPLE SURVEY - ONLY A PART OF
THE POPULATION WILL BE ASKED



QUESTIONNAIRE WITH CLOSED QUESTIONS

(WITH ANSWER CATEGORIES)

SELECTION OF THINGS TO EAT

WHAT WOULD YOU PREFER MOST TO EAT AT THE PARTY?
(CHOOSE ONLY ONE ANSWER)

CHOCOLATES	<input type="checkbox"/>
APPLES	<input type="checkbox"/>
ICE CREAM	<input type="checkbox"/>
CAKE	<input checked="" type="checkbox"/>
DON'T KNOW	<input type="checkbox"/>

0

1

QUESTIONNAIRE WITH OPEN QUESTIONS

(WITHOUT ANY ANSWER CATEGORIES)



SELECTION OF THINGS
TO EAT

WHAT WOULD YOU PREFER MOST
TO EAT AT THE PARTY?
(WRITE ONE ANSWER)

ICE CREAM

5 HOW TO PROCESS THE COLLECTED DATA?



6 NOW I HAVE REAL STATISTICAL INFORMATION!

SELECTION OF THINGS TO EAT

SWEETS		KIDS
APPLES		4
ICE CREAM		6
CAKE		12
CHOCOLATE SWEETS		7
DON'T KNOW		1

MAKE SURE YOUR TABLE
IS UNDERSTANDABLE

- TABLE TITLE
- COLUMN TITLES
- ROW TITLES

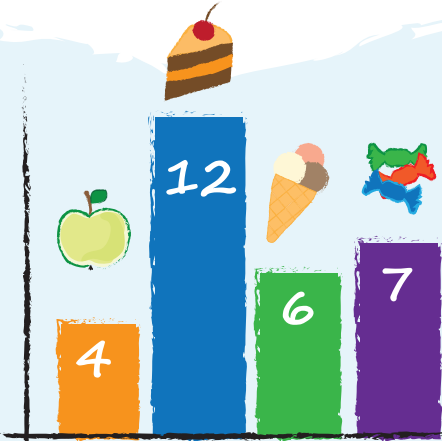


7 HOW TO MAKE THE INFORMATION MORE UNDERSTANDABLE?

PIE CHART



FREQUENCY DIAGRAM



TO MAKE YOUR POINT MORE CLEAR YOU CAN SHOW YOUR DATA AS GRAPHS OR DIAGRAMS



8 HOW TO MAKE USE OF STATISTICAL INFORMATION?

WITH THE HELP OF STATISTICS YOU CAN LEARN

- HOW MANY PEOPLE LIVE IN THE DIFFERENT REGIONS OF UKRAINE
- WHERE THEY WORK
- HOW MUCH MEAT, FISH AND VEGETABLES THEY EAT
- AND MUCH MORE...


YOU CAN COMPARE THIS DATA WITH THE DATA FOR PREVIOUS YEARS OR USE IT TO MAKE FORECASTS

KNOWING HOW MANY DIFFERENT SORTS OF SWEETS THE KIDS ATE AT THIS YEAR'S PARTY, IT IS POSSIBLE TO FORECAST HOW MANY WILL BE EATEN NEXT YEAR. OF COURSE, SUCH FORECASTS CAN'T BE EXACT. NOBODY CAN CALCULATE EVERYTHING UP TO THE LAST SWEET, NOT EVEN STATISTICIANS. STATISTICIANS ALWAYS TRY TO AVOID ERRORS WHEN CALCULATING THE NUMBER OF SWEETS (AND OTHER GOODIES!). ... FOR YOUR CLASS, FOR YOUR CITY, FOR ENTIRE UKRAINE

WHERE TO FIND STATISTICAL INFORMATION ABOUT UKRAINE?



www.ukrstat.gov.ua



OFFICIAL STATISTICAL INFORMATION HAS
TO BE INDEPENDENT, RELIABLE AND OBJECTIVE,
BECAUSE IT TELLS ABOUT YOUR AND MY LIFE.

IN UKRAINE THE STATE STATISTICAL SERVICE
OF UKRAINE (SSSU) IS RESPONSIBLE FOR
OFFICIAL STATISTICS

ANSWERS

THE STATISTICIANS HAVE
MADE THEIR CALCULATIONS
AND CAN ANSWER THE QUESTIONS
WE ASKED IN THE BEGINNING
OF THIS BOOK:



IN UKRAINIAN SCHOOLS –
TOGETHER WITH YOU –
THERE ARE 3 MILLION AND
757 THOUSANDS PUPILS



BUSES IN UKRAINE CARRY DAILY
8 MILLION PASSENGERS

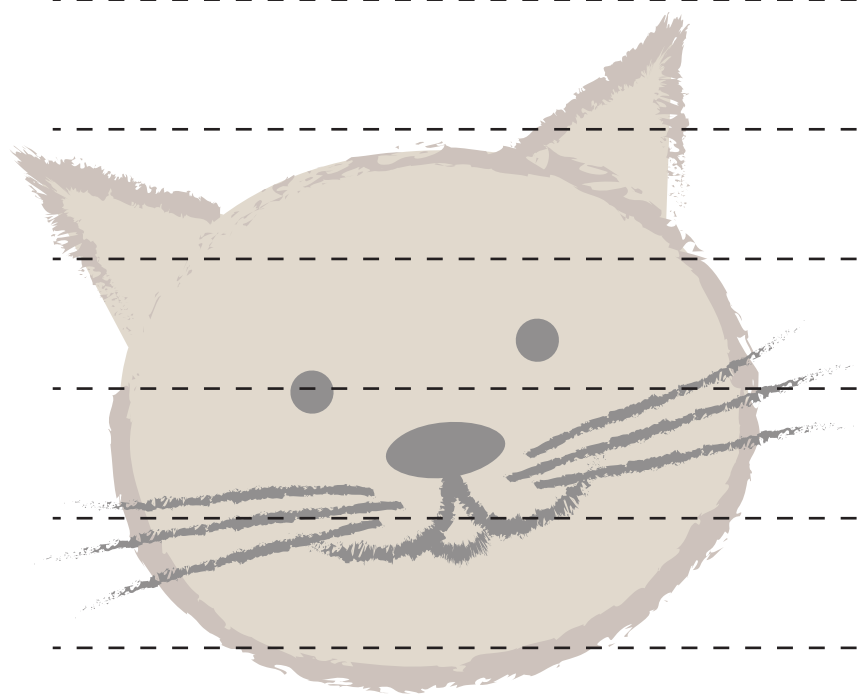


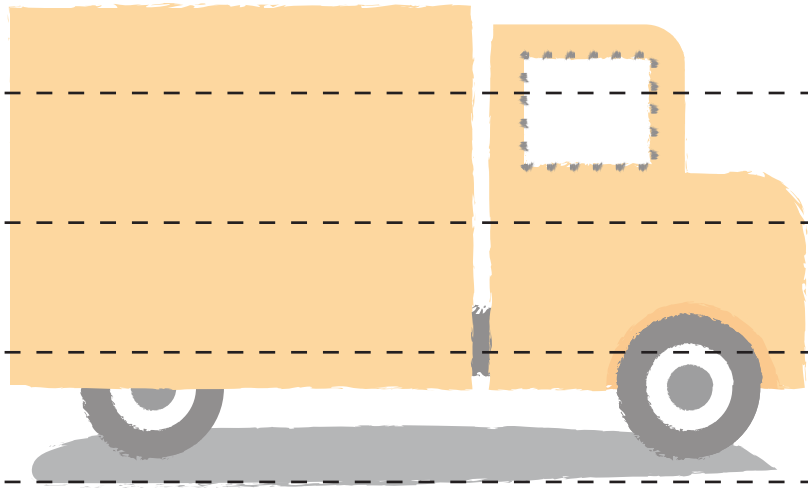
86 THOUSAND TONS –
SO MUCH CHOCOLATE
IS PROCESSED BY UKRAINIAN
MANUFACTURERS IN A YEAR











STATISTICS STEP BY STEP

Development and financing –
TWINNING PROJECT on Statistics
Irina Bernstein irb@dst.dk
Olga Burbelo twinning.sssu@gmail.com

In cooperation with the State Statistics Service of Ukraine
Olena Vyshnevskaya o.vyshnevskaya@ukrstat.gov.ua

Design, layout and illustrations
Maxim Yaremenko stokphoto@gmail.com

Material from Statistics Lithuania
has been used in producing this book

USEFUL LINKS

State Statistics Service of Ukraine
www.ukrstat.gov.ua

Statistical information on the European Union
www.ec.europa.eu/eurostat

Info Twinning project to reform the Ukrainian statistics
www.dst.dk/ukraine,
www.facebook.com/twinning.statistics

E-book
www.dst.dk/ukrainekids in Ukrainian
www.dst.dk/ukrainekidz in English
www.ukrstat.gov.ua/children/children.htm

Disclaimer: This publication has been produced with the assistance of the European Union.
The contents of this publication are the sole responsibility of the authors and
in no way can be used to reflect the conclusions of the European Union.

© Twinning Statistics 2015

