

# Changes on material covered concepts for each student

Total students: 24

Students with modified materials: 5

## Students with modified materials

### Student: 1

Fitness before:	5.379310344827587
Fitness now:	0.0
Modified materials:	1
Material ID:	0
Added concepts:	[3, 16, 24]
Removed concepts:	[]

### Student: 5

Fitness before:	2.1111111111111116
Fitness now:	0.0
Modified materials:	3
Material ID:	0
Added concepts:	[1]
Removed concepts:	[]
Material ID:	143
Added concepts:	[]
Removed concepts:	[1]
Material ID:	234
Added concepts:	[]
Removed concepts:	[20]

### Student: 12

Fitness before:	1.9310344827586226
Fitness now:	0.0
Modified materials:	1
Material ID:	0
Added concepts:	[7]
Removed concepts:	[]

## Student: 14

<b>Fitness before:</b>	1.9047619047619058
<b>Fitness now:</b>	0.0
<b>Modified materials:</b>	1
<b>Material ID:</b>	0
<b>Added concepts:</b>	[7]
<b>Removed concepts:</b>	[]

## Student: 23

<b>Fitness before:</b>	3.1111111111111116
<b>Fitness now:</b>	0.0
<b>Modified materials:</b>	3
<b>Material ID:</b>	129
<b>Added concepts:</b>	[]
<b>Removed concepts:</b>	[1]
<b>Material ID:</b>	269
<b>Added concepts:</b>	[]
<b>Removed concepts:</b>	[20]
<b>Material ID:</b>	273
<b>Added concepts:</b>	[1]
<b>Removed concepts:</b>	[]